AN INVESTIGATION FOR THE GCHOLASTIC READINESS OF THE GCHOOL CHILDREN

HY

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THESIS BUBMITTED TO THE
UNIVERSITY OF BOMBAY
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN EDUCATION.

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This is to certify that the thesis entitled "An Investigation into the Scholastic Readiness of Preschool Children" submitted to the University of Bombay by Ms. V. Murthy for the Degree of Doctor of Philosophy in Education her own work carried out under my guidance and is worthy of examination.

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ACKNOWLEDGEMENTS

The present research would not have been possible without the support and help of many. Though I may not be able to list all of them, I would like to mention a few to whom I am specially grateful.

I owe a deep sense of gratitude and indebtedness to my esteemed guide Dr. Gulistan J. kerawalla for her valuable guidance, direction and encouragement throughout this research work. Her professional advice and expert help has enabled me to complete the study. Her perfection in every task and organised methodical approach to research has instilled in me a deep sense of keenness to undertake more research.

I am also grateful to my earlier guide Dr. M.D. Bengalee, ex Vice-Chancellor, University of Bombay for her guidance and help rendered during the initial stage of my study.

I feel deeply obliged to the Managing Council members of S.I.E.S., the Principals of S.I.E.S. High School and S.I.E.S. College of Arts, Science and Commerce for extending continuous cooperation and help in conducting the study. Special thanks are to the Supervisors and teachers of the Pre-Primary section of the S.I.E.S. school without whose help the data collection may not have been possible.

Some of my students of the Institute of Primary Education are gratefully remembered for the invaluable help they rendered during data collection.

I owe my gratitude to the eminent experts for their suggestions in constructing the tools. The schools which discussed with me the admission procedures deserve special thanks.

I thank the children and their parents who participated as respondents and furnished valuable data.

I would also cherish the valuable cooperation and help I received from the librarians and the staff of Jawaharlal Nehru Library and Fort Library of University of Bombay, Tata Institute of Social Sciences, National Information Centre, S.N.D.T. Womens' University and St. Xavier's Institute of Education.

Last but not the least it is my duty to express heartfelt gratitude to my husband without whose encouragement, patience, inspiration and continuous support this research would not have seen the light of the day.

VIJAYA MUNTHY.

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ABBREVIATIONS

		and by the same and the last is all familiar in an included and the same and the same
s.R.	togen telle	Scholastic Readiness.
P.S.C.	F E	Pre-school Children.
m.s.	u r	Motor Skills.
c.s.	13	Cognitive Skills.
P.S.	益	Psycho-social Skills.
C.E.L.	Ħ	Comprehension of English Language.
A.A.	Æ	Academic Achievement.
L.S.	5 1	Language Scores.
G.K.	'2	General Knowledge.
N.W.	п	Number Work.
O.A.	11	Other Activities.
19t U.I.	12	19t Unit Test.
14t S.E.	니	lst Gemester Exam.
2nd U.T.	27	2nd Unit Test.
2nd 9.E.	3 E	2nd Semester Exam.
S.A.	57	Self Attributes.
P.D.	5:	Personal Data.
M.A.	32	Mental Abilities.
Р.Т.	:=	Personality Traits.
5.5.	Li	Social Skills.
K.E.	35	Knowledge of English.
E.S.	#	Economic Status.
F.O.	=	Father's Occupation.
M.O.	m	Mother's Occupation.
		man and the second seco

P.E. = Parental Education.

F.E. = Father's Education.

M.E. = Mother's Education.

N.S. = Number of Siblings.

R.A. * Residential Area.

P.1. Parental Involvement.

A.C.R. Attitude of Child Rearing.

A.H. = Actual Handling.

I.P.R. = Inter Personal Relations.

E.P. * Expectations of Parents.

F.P. = Facilities Provided.

P.C. = Preparation of the child.

CHAPTER I

INTRODUCTION

Education has been found to be the most important ingredient responsible for the progress of man. No society or community has ever progressed without education. Hence there is growing concern about imparting education to all, particularly, to young children in the best possible manner. Since, the early years are the most critical years, educationists want to know how best to educate the young children, what are the components of an educational system and, most of all, what are the basic essentials for optimum learning process.

The critical importance of early experiences have been highlighted emphatically by Anutai Vagh in "Parent and Community Participation in the preschool programme". She clearly brings out that a great variety of practices and experiences affect the early development. Grewal too emphasises the importance of early stimulation concluding that the most rapid period for the development of many

¹ Vagh, A. : Parent and Community Participation in the Preschool Programme. New Delhi, NCERT 1984. p. 2

² Grewal, J. S. : Early Childhood Education. Agra, National Psychological Corp., 1984. p. 2

characteristics including intelligence is the first five years of life. He stressed the crucial impact of child's early environment. Habits and attitudes learned and adopted during these years remain with the person for a life time.

The need for early childhood education in India, in the context of its national objectives is even more. India as a socialist, democratic, republic, is committed to providing social justice and educational opportunity to all its citizens right from their infancy and early childhood. In the interest of her optimum national development and progress also, the highest possible development of her human resources is imperative. Much of this learning depends on how ready the child is or, made ready. These years comprise the years concerned by early childhood education.

One of the most important factors in any learning situation is the pupils background and previous experience, and the part both have played in developing his readiness to learn. When the child comes to school for the first time, he brings with him certain knowledge and skills that are the result of his experiences and his environment. From such a background, peculiar to each individual the pupil approaches the first learning experience in the classroom. The various ways in which the pupil may meet this new experience depend on his degree of readiness to deal with the experiences at hand.

It has been found that in the present educational system the curriculum and curriculum methods are pre-decided. Efforts are made to fit the child into the system, rather than the system be fitted according to the requirements of the children. Hence large number of children are failing 1st grade most often due to insufficient achievement in learning process. Behaviour problems blossomed and so did concern about why first graders were having difficulty in learning.

True, learning problems at any level can also be due to poor instruction, inappropriate instructional materials, overcrowded classrooms, inadequate preparation of teachers, low I.Q., lack of innovation and so on. But the factor given singular attention is having difficulty for being not ready when instructions began.

The study of readiness has, until recent years been the victim of total neglect by both the researchers and the educationists interested in developmental processes in children. The entire system of measurement and screening (testing readiness for admission) has long been misused and abused. It is one of the many consequences of

¹ Lapp, D., Flood, J.: <u>Teaching Students to Read</u>. New York. MacMillan Publishing Co. 1988. p.58.

the general lack of educational planning in India that the impressionable, plastic & educationally potent period of life has received very little attention. Even though the national policy of education 1986 has emphasized the need to strengthen ECCE, it is important to note here that the Central Government is not responsible for pre-school education; consequently, its influence varies from state to state, being mediated through the department of Social Welfare and the corresponding Social Welfare Boards at State level.

The Issue :

relative neglect by educationists σf readiness and its paramount importance on learning is one the strange paradoxes in the educational system. One wakes up when there are failures or when a child is slow 10 learning or there are associated problems in learning. language of problems, difficulties, inadequacies and so are familiar to all those so closely associated with learning and they want to do something about them. There are devices for correcting, by-passing or overcoming these but what about the normal average child, his capacities, capabilities? What inculcating, enhancing, motivating and sustaining the prerequisites of learning in him? These remain relatively neglected in studying the emergence of competencies children for learning.

Again, what about identifying potentially unready pre-school children! This would provide the base for early intervention efforts and compensatory programmes. On the positive side too the early identification of ready children in under privileged settings is of equal importance for their optimum learning.

School makes new adaptive demands on children. As such, an increase in emotional disturbance when the children entered school would not be surprising. The persistent level of more impaired functioning coupled with the decline in academic performance is a matter of grave concern. Emotional health and academic achievement are closely related to each other.

Emotional impairment leads to under achievemnt in the following ways. Learning is a function of, among other things, exposure to environmental stimuli and the child's ability to process information and formulate assumption about the world in which he lives. The shy and inhibited child isolates himself from contacts with the people, events and objects and he is listless and sluggish in

¹ Kohn, M.: <u>Social Competence</u>. <u>Symptoms and Under Achievement in Childhood</u> - A langitudional perspective. New York, John Wiley 1977, pp. 248-249.

the mode of thinking. The hyperactive and restless child's interactions with his surroundings are too brief and superficial for him to acquire knowledge and develop intellectual skills. He has a short attention span, cannot concentrate and his mental processes are disorganised. Not only are emotionally impaired children handicapped in school achievement but emotionally healthy children enjoyed an advantage over them in mastering academic subjects. Relating the positive ends of the discussions to academic attainment, the child who is inquisitive about the world around him acts frequently with people and objects and has an active mind. The task-induced child has systematic contacts with his environment and thinks in an organised way.

Emotional impairment leads to underachievement or difficulties in learning but the vice-versa is also true viz., the child struggling to cope-up with the tasks expected of him in school could be emotionally disturbed, unhappy tense, anxious, worried and in turn develop a low self-concept. This could considerably block his future progress, since he does not attempt at learning very enthusiastically and sulks. Hence, according to Bloom; an educational system to be viable: (a) must provide opportunities for all round growth and learning and furnish environmental

¹ Lilee, D.L. : <u>Early Childhood Education</u>. Chicago. Science Research Association Inc. 1975. p. 3.

supports and means to achieve the goals smoothly.

must continuously and certainly be geared to child's requirements, capacities, potentials and the snags in his environmental climate must be removed. If children should learn to the optimum, they must sustain the curiosity, the inquisitiveness, the eagerness, the urge to know more things in the world. It becomes imperative that the 'Readiness' aspect be carefully examined, scrutinised and the related aspects studied. It would not be wrong here to say that the present educational system is not conducive to the all round development of the child. One cannot escape the negative impact of the various factors embedded the system.

With the over emphasis laid on memory, repetition and on the 3 R's, the child's enthusiasm to know more about things in a pleasant manner is ripped away very much early. The child attends school as a routine and a compulsion, with no interest or involvement and, actually, develops averseness to the entire process of learning. This is mainly because of not taking into account the readiness aspect.



The Background of the Study :

A sizeable number of children at S.I.E.S., have been found to be having difficulties in meeting the demands of the school. They had difficulties in paying attention, in concentrating, in comprehending, in socializing, in staying away from their mother and so on as expected at the pre-school stage. The children attending the school belonged to different socio-economic class. There was tremendous discrepancy in their learning capacities due to their readiness level.

There were also children who came from homes which belonged to underprivileged or disadvantaged class. These children not only entered school without much motivation for learning but also lacked the necessary stimulation that is essential at this formative stage.

Inspite of best efforts, equipment and progressive techniques it was felt that the children were not receptive and the teachers sensed a kind of frustration with the lack of progress made. It was opined that proper insight

South Indian Education Society (S.I.E.S.) is a registered body conducting educational services from Nursery to the Management courses since 1930. Nearly 9000 students avail of these educational programmes every year.

into the capabilities of students who were ready for schooling would improve matters. Another opinion evinced was that if, through some kind of screening, the category of children admitted was ascertained, perhaps, problems revolving around their learning could be minimised.

Admissions to schools are conducted nowadays at the nursery lelvel only (where nursery is attached to primary school) after which no formal admission procedure, is followed. Once the child is admitted to the nursery, he gains automatic admission to the primary and, thus, his entire schooling is decided once and for all. Though it may look ridiculous but the young child is subjected to a formal interview with a host of questions which are expected to be answered with precision.

At S.I.E.S. too, admissions are conducted similarly to the pre-primary section at three years, after which the child is not subjected to any interview upto the 10th Std. The school has been following the same procedure for admission, where, the children are asked few questions but it was felt that the procedure was not suitable and needed proper rehauling since it did not cater to the requirement of appropriate screening and did not determine the capabilities of the young child.

To find out what other schools were doing and how they were tackling the issue, the researcher conducted a random survey of 15 schools a list of which is enclosed in Appendix No.1, the findings of the survey are frightening. Almost all the schools followed some kind of admission procedure but none was scientifically based and did not take into account the child's readiness and development. In fact when told that the possibility of devising some suitable method for screening was being attempted many requested that they be furnished with it. Most of the schools asked random questions which tested mainly the conversational skills. is a known fact that the child at this stage is proficient in his conversational skills. Even if he is, he averse to strangers and some brilliant children do not speak when encountered by strangers. Some of them even expected children to recite rhymes, numbers, alphabets and one school even had a written test for admission. Only a few schools allowed the parents to enter with the child, whereas, most of them expected the child to enter alone which was extremely traumatic. Often children were taken away from parents screaming and wailing.

It was also observed that this produced tremendous anxiety symptoms both in parents and children. The tiny-tots were drilled and thrust with lot of information to learn and on the day of interview, were threatened by parents with dire consequences if they do not perform well

and bribed with delicacies so that they would answer and perform well at the interview.

To combat all this and find some suitable solution, the researcher decided to work in the area. education is recognised universally as a basic human which means, it should be accessible to everyone. this implies that there is no room for selection, that no kind of selection procedure be followed anywhere because selection entails rejection. But, if there is adequate provision for education for all or some kind of neighbourhood school concept is accepted, where, every child in the neighbourhood automatically gets admitted to the school, situation would be different. Added to this are private schools some of which have commercialised education and with the population explosion and lack of number of schools accommodate all, some kind of selection procedure is being Unfortunately, this selection procedure is not followed. scientific or does not include all the aspects of scholastic readiness. So, in order to systematize the procedure it was decided to embark upon devising scientific and objective ststem/procedure.

Something had to be done so that, the child's readiness and developmental aspects are considered alongwith the requirements of the schools, and young children are not subjected to a kind of exploitation, having to struggle to

meet demands and expectations beyond their capacities. Again, there are about 10% cases of school failure. It is also recognised that many children who experience learning problems also suffer from sensory, physical, social, emotional or family problems, conditions that appear to predate school problems and render children more vulnerable to school failure. Identification of these children, prior to school entry, can lead to intervention that could reduce the risk of school failure.

Also about 2% of the children at S.I.E.S. were later discovered to be educationally handicapped and hence should have been identified earlier and referred for remedial-educational and related, services.

An enquiry with few of the special schools also revealed that children were brought to them late and very rarely at the pre-school stage during which time much could have been done to change the course of the child's life.

Rationale for the Selection of the Topic :

Education undoubtedly is a basic requisite for every child. But many children at S.I.E.S. were found to be having difficulties in learning. Some were ready to take on the tasks expected in school and some were not, some came in

with lot of motivation, zeal and enthusiasm to participate in all the activities and some were docile and aloof.

Imparting education without the knowledge on the level of the child was found to be meaningless. Much of the effort to teach was lost because some children were not receptive or ready to learn. Undoubtedly, knowing the child's capabilities and potentials to learn is a must any teaching-learning to take place. At the same time, for one can't wait for the child to be ready but extend and expand his existing knowledge, continuously. For this idea of the state of readiness only will provide exact clues as to from where to extend his horizon, what areas stimulate and so on. Learning takes place only when there is continuous support and encouragement, constant stimulation and motivation. It was felt that if this readiness aspect researched upon, probably, solution could be arrived at teaching children who have difficulties in coping with demands. It may also be possible to reorganise teaching strategies on the basis of issues revolving around the readiness aspect. Of particular concern were children from the underprivileged class who were disadvantaged all the in taking-up school tasks. Evidence today indicates that the children with a home background that is economically disadvantaged lacks the necessary orientation towards formal This group has been termed the disadvantaged learning. group. It is found that language development in such homes

is quantitatively inferior and more limited than in the middle class homes. There seems to exist a lag in vocabulary, sentence length and grammatical structures. Another area is reasoning ability and logical development. The children would be doubly disadvantaged due to their home background and if schools were not to take into consideration this handicap, the disadvantage may then pass from generation to generation.

The readiness aspect, though is genetic, is also environmentally nurtured and a thorough understanding and knowledge of this aspect is of paramount importance, if learning has to be offered meaningfully.

The problem of the disadvantaged is the early drop-out rate and failure, leading to a great deal of wastage and stagnation at the primary level. A study conducted by N.C.E.R.T. in urban municipal schools found that more than 50% of children at the end of class I scored zero in a reading test or in other words, could not read at all.

The only answer is deep knowledge of the readiness aspect. This itself is not the solution to the

^{*} Thakkar, A. : <u>Perspectives in Preschool Education</u>. Bombay. Popular Prakashan, 1980. p. 3.

problem but it will definitely pave the way for devising suitable programmes to meet the particular needs of the group and evolving of learning strategies that will bring about necessary changes in the learning process of child.

Since India consists of a large part of population belonging to the lower-socio economic group, the associated problems of learning is bound to be there in all schools. Definitely, no community can let this large chunk of population drift away. To reduce the high proportion of the disadvantaged children with scholastic problems, it will be necessary to delve deep into the concept of readiness which may enable the academicians to envisage the difficulties that may be encountered due to lack of readiness.

The pre-school age is the most crucial and impressionable age in one's life. More over, the rate of development of the stage is so rapid that the child is able to take in about anything if it is given to him in the form in which he can understand it.

When learning, opportunities match the child's potentials not only do they progress smoothly but it affects

¹ Muralidharan, R.: A Guide for the Pre-School teachers. New Delhi, N.C.E.R.T., 1978. p. 1.

and influences the child's entire self tremendously. Firstly, the child gets interested in the process of learning and wants to know more and more. Secondly, he develops a positive self-concept about himself and his capacities that he is able to absorb what is given. Thirdly, he starts liking school when the activities and programmes seem to cater to his requirements and lead him through the ladder of progress.

On the other hand, when learning opportunities do not match the child's potentials, hardly any learning seems to take place; the child is not easer to know anything more and all his enthusiasm wanes. He starts considering himself good for nothing. Anxiety and insecurity mounts up and in the bargain he starts disliking school. Pre-school years being the foundation years it is imperative to see that the foundation of the attitude and approach to learning are laid strong. It is in these critical years that his future is laid, how involved he will be with the entire process and how committed will he be for years to come.

Adults dealing with the disadvantaged and the underprivileged in particular, need to have a thorough knowledge of the child's readiness, since the very areas in which they are unready could become an impediment for any learning. The awareness could enable the personnel to conduct programmes which could compensate the environmental

snags and enrich their experiences to be on par with their peers to take to the tasks expected in school. The environmental stimulation which lacks at home, which, in fact, readies the child in all aspects for the learning process to take place could be compensated and substituted by the school.

If this aspect is not looked into at the preschool stage itself not only a lot of damage is caused for the child in not enabling him to take to learning smoothly but his very start is shaky, his very foundations are weak. Needless to say any construction on a weak foundation either crumbles down or may not be built very high. As for the child, he either drops out of school very soon or because of his failures does not persue studies for very long.

It was also necessary to study the entire phenomena of testing and screening children for admissions — whether they were meaningful, whether they considered all the aspects that were necessary, whether at all they measured what they were supposed to, whether they had any ill-effects on children and so on.

Characteristics of the Pre-School Stage :

The pre-school stage also called the 'Early

Childhood Stage' is a period between the ages 2 and 6 when the child becomes an entity. The rate of development is most rapid in the early years of life. It is during these years the child learns to deal with his environment and satisfy his basic needs. The nurturing experiences the child receives in the early years of his life serve as the foundation for his/her subsequent learning. These years determine the shape and the patterns of the individual's future development.

In the pre-school period of development, the child gradually changes into a firm supporter of himself or enters the ego-centric phase. Due to this pre-occupation with himself, he is able to establish an understanding of himself, his needs and his relationship to the important people in his environment. The most significant change in the development of the child during this period is the establishment of independence and autonomy. The child wants to do things for himself, and master the intricacies of meeting his own needs.

Besides the chronological span of years from two to six years, another indication that the child is progressing into the pre-school period is the development of the sensory motor intelligence and mastering of the skills of communication and thinking. The pre-school years are marked by increasing interactions with people and objects in his environments. These interactions with the environment help

the pre-school child to grow physically, emotionally and, ofcourse, socially. The sense of autonomy grows into sense of initiativeness and imaginativeness. Much of the learning the child does is through these interactions with the environment.

All the different aspects of development are interrelated. The physical and motor development, the child's achievements in language and communication, the development of social, emotional and intellectual skills, the emergence of a distinct personality are interwoven and contribute to the total growth, of the whole child. During the pre-school years the child's rate of progress in physical growth and his development in social, intellectual and emotional growth shows a positive relationship.

Environmental influences have the greatest effect on the child during periods of rapid development. Therefore appropriate programme during the early years of life will be particularly vital so far as later development is concerned.

Available research evidence indicates that 1

¹ Muralidharan, R.: <u>Understanding Young Children and their Programmes</u>. Paper presented in the National Conference of I.A.P.E. 1988.

- (a) About 50% of intellectual development takes place
 between conception and 4 years and about 30% between 4
 B years.
- (b) About 50% of the level of vocabulary attained by 18 years of age, takes place within the first eight years.
- (c) About 50% of a child's general educational attainment at 18 years, is attained by 9 years of age.

It has been said many times in educational literature that perhaps as much as half of a child's basic abilities are developed before he reaches the age of 4. It seems to be widely accepted that a child's development is most rapid and is most subjected to modification, during the first 4 or 5 years of life. Many experts "Evans (1975) Kresh (1969), Bruner (1960), White (1959) believe that the environment has the maximum impact on the child during this period of most rapid growth. It seems clear that stimulation plays a very significant role in increasing intelligence.

Detailed studies of the upbringing of clever children who later became very clever men and women, seem to point to the fact that they all received extensive stimulation as children. Detailed studies of the lives of very clever children categorically show that they are subjected to intensive early educational stimulation.

The brain may be likened to a computer. Into it are fed millions of impressions which are stored and processed. Day by day appraisals, judgements and decisions are made which are processed. It is surely obvious that greater the variety of sensory stimuli to which one is subjected when young (stimuli received through the eyes, the nose, the mouth, the ears and through the tactile and kinesthic senses), greater is the store house of impressions upon which the brain can draw.

Early years are thus crucial years for the development of the child and each child needs an exceptionally rich environment for his optimum development. But, for the majority of India's children this richness of experience......which, every child needs and deserves is beyond reach since most parents are illiterate, poor and too busy trying to make both ends meet.

However, this richness is not merely the richness reflected by expensive clothes, rich food or a beautiful house but it is richness of experience in terms of parent—child interaction and parental aspiration. A home in which the adults find time to play with children, to narrate stories to them, to sing with them, is, perhaps, a rich home for the young child. A home which trusts the child, believes in his/her capacity & has high hopes for him/her is the best stimulator for the child. It is, therefore, important that

all parents, no matter how poor or illiterate they are, should be given the confidence in themselves to play the role of educators for their children, right from the infancy stage.

Significance of pre-school education :

'Pre-school education, also referred to as 'Early childhood education' has assumed great significance in educational development, particularly in the context of the massive effort that is being made to institutionalize elementary education. It has been demonstrated that pre-school education helps in the smooth transition of the child from the informal atmosphere of the home to the formal atmosphere of school. It also strengthens motivation for schooling and promotes what is generally termed as "School Readiness". The fast changing sociological conditions have also necessitated that adequate provision be made for pre-school education.

The tremendous wastage and stagnation that are seen in classes I and II in India can be reduced considerably and even avoided, if the children who join the pre-school classes are prepared in advance for formal schooling.

^{*} Muralidharan, R., Banerjee, U.: A Guide for Nursery School-Teachers. New Delhi. N.C.E.R.T., 1984. p. 1.

A child who goes to a pre-school before joining the primary school adjusts himself much better and fares well in primary classes, because of his early preparation. He has had group experience, he has gained better emotional control, he has developed proper habits and attitudes and he has been encouraged to investigate explore and draws his own conclusions. Such preparation in the nursery school helps him considerably in his subsequent education.

Pre-school education aims at the all-round development of the child - physical, social, emotional and intellectual. It helps the child to develop good health habits, proper attitudes and desirable social skills. It leads to better adjustment to groups and increased emotional maturity on the part of the child. It develops in the child a questioning mind and scientific outlook. In other words it stimulates the total development of the child.

The pre-school years are the most critical and vulnerable period of the child's life and the pre-school atmosphere provides a healthy environment and stimulating experiences during this peiod for his overall development. The pre-school education lays the foundation for the child's

¹ Kohn, R.: The exploring child. Bombay. Orient Longman Ltd., 1984. p. 16.

overall development, through guided experiences and interaction with a group of children of comparable age and stage of behaviour.

Educators and psychologists are agreed that more learning takes place during the first 5 years than at any other period in life. It is during these formative years that children are entitled to an opportunity to grow and develop under the most favourable conditions.

In India, unfortunately, pre-school education is yet to become an integral part of the Indian education system and is usually regarded as a welfare activity. Whildren below the age of 6 constitute 17% of the total population of India and 15 million are being added every year. Considering the fact that the majority of the Indian children come from disadvantaged homes, the pre-school programmes need to be all the more emphasized. The problem of the disadvantaged has indicated that children from home backgrounds that are economically and socially at the lowest level lack family orientation towards learning and are virtually excluded from success in school.

¹ Savarirayan S.: Child Development. Bombay Sheth Publishers, 1971. p. 258.

² Green, M.M., Woods, L.E.: A <u>Nursery School Handbook for Teachers and Parents</u>. Delhi. Universal Book Stall, 1969. p. 2.

So far, only the higher and middle class have taken advantage of the pre-school educational facilities for their young ones where as the poorer section of the population is denied of the same. Inspite of various policies proposed by the Government nothing much has been achieved in the realm of pre-primary education. The government's programme for universalisation of education has taken care of the educational needs of children from the age of 6 upwards. But the development of children in the 2 - 5 age group who are on the threshhold of entering the primary school have been neglected.

Apart from the lack of number of Institutions, even the few that are there lack the requisite physical facilities and properly trained staff. The unplanned growth of pre-school educational institutions has already affected the quality. Hence, a lot of emphasis needs to be given to the field of pre-school education.

National Policies on Education :

The Constitution, in Article 45, lays down, as a directive principle that every child upto the age of 14 shall receive free and compulsory education. Articles 39, 46 & 47 respectively lend further support to this Constitutional directive. The founding fathers of the Constitution clearly intended to ensure that every child irrespective of social or

economic status of his/her parents, received care education from birth upto the age of 14 years. This goal to have been achieved within a period of 10 years from the commencement of the Constitution (Article 45). But all along, this directive has been interpreted narrowly 35 applicable only to the education of children from the age five or six upwards., It is, however, never too late to acknowledge, that since care and education must begin birth, ECCE is part of what was originally envisaged under the Constitution for the development of all children until they complete the age of fourteen years.

The Education Commission (1964-66), clearly recognised the significance of pre-primary education in child development and of its critical link with enrolment, retention and learning outcome in primary schools. Yet, the National policy on education (NPE) (1968), despite its concern for early fulfilment of the Directive Principle of Article 45 and for reducing the prevailing wastage and stagnation in schools; preferred to ignore the Commission's recommendations on pre-primary education. Years later, presumably as a consequence of the National Policy for children (1974), the Fifth Five Year Plan made a beginning by formulating a comprehensive project in the form of the

Report of the Committee for review of National Policy on Education 1986. Final Report. New Delhi, 1990. p. 31.

Integrated Child Development Services (ICDS) for the underprivileged and educationally backward sections of society.

Although ICDS made rapid strides in the late seventies and early eighties, the government's commitment towards universalisation of early childhood education remained ambiguous, as there was still no clear policy declaration. It is for this reason that the NPE 1986 is a historic document in that it boldly recognises the importance of ECCE and lays down the 'holistic' principles on which the programme is to be developed. The Policy declaration views ECCE as an essential component in children's development and as a support service for universalisation of elementary education and women's development. However, the NPE does not refer to the constitutional imperative to provide ECCE to all children.

The scope of the Constitutional directive (Article 45) of providing, within a specified time-frame, free and compulsory education for all children until they complete the age of fourteen, years should be enlarged to include ECCE. It is important to note here that the central government is not responsible for pre-school education and that, consequently, its influence varies from state-to-stae, being mediated through the Department of Social Welfare and the corresponding Social Welfare Boards at State level.

Various expert bodies set up by the Government of India from time to time have given their suggestions about the needs of children in the area of health, nutrition and education. But due to constraints on resources and administrative difficulties most of the recommendations do not seem to have been implemented. Many of them remained as pious resolutions.

While examining the above points it appears that the gaps between needs and services in the field of child education will continue to be large until concerted efforts are made by voluntary organisations and government agencies, mutually in order to take effective steps to fulfil the beeds of the children.

The National Scene :

There is a tremendous gap between the Need and Provision. It is estimated that children below six years of age number about 14 crores (17% of the population). Of these it may be conservatively estimated that about 5.60 crores (40% of the target age group) fall below the poverty line, whose very survival and development are threatened by neglect

¹ Singha, H.S. (School Education in India - Contemporary Issues and Trends. New Delhi, Sterling Publishers . 1991. pp. 8-11.

lack of essential child care services.; And there and many more, above the poverty line, whose need for ECCE only a little less acute. Yet, the recent estimates indicate that 1.43 crore children in the 0-6 age group, i.e. only 10% the target group or one-fourth of the vulnerable segment receive some elements of child-care services. Only some of them may receive an integrated package including health care, nutrition and early childhood education and very few receive day care. Only about 15% of the children in the 3-6 group receive pre-school education. This is, thus, the extent of the gap between the need and the provision. In fact ECCE should be included in the Minimum Needs' programme. time that attention is drawn not only to the importance early childhood care and education but to some of practicalities involved in providing it.

As economic pressures mount in developing countries, like India, heart-wrenching decisions have to be made over relative priorities in education. There is a danger that Early Childhood Education may continue to be viewed as something of a luxury. Such thinking is fundamentally wrong. Each time a centre for pre-primary

¹ Report of the Committee for Review of National Policy on Education 1986. Recommendations - Government of India, New Delhi, 1991. p. 114.

² Aggarwal, J.C.: Ramamurti Report 1990 on National Policy on Education in India. Delhi, Doba House, 1991. p. 49.

education, staffed by sufficiently qualified personnel, begins to operate in a developing country, a veritable nursery for talent is created. "If I were the minister for Education in a developing country, I would not rest until I had beside me a small team truly aware of the significance of pre-primary education".

If any 'real equal opportunity in educational, occupational and social terms are to be laid down, it can only be in the years between birth and five or six years of age'. For a just solution to the problem of inequality of opportunity in a situation where many children do not go to school at all and others drop out prematurely, laying strong foundations through pre-school education is the only answer.

Future Strategies :

First and foremost drastic changes are required for a better future in the field of pre-school education. The term education, should not have a reference to 'schooling' or 'going to school' only. In other words, the strong institutional associations should be removed and education must mean, particularly at the pre-school level

¹ Heron A.: Planning Early Childhood Care and Education in Developing Countries. Paris, 1979 UNESCO: International Institute for Educational Planning. p. 111.

that which takes place at home and in other setting within the community. Only then can one evolve an ideal pre-school system in the real sense with the limited resources available.

Since the pre-school education is linked with universalisation of elementary education, it will have a positive impact on primary school learning environment. Hence, wherever possible, ECCE centres should be linked physically as well as programmatically with the primary school. ECCE will be like a school preparation class which would help in the enrolment, retention, performance at school and development of self confidence in children.

The teacher education and personnel training for E.C.C.E.at all levels is another neglected area. The current training courses available in the country should be reviewed from this perspective and become the starting point for developing a country-wide network of E.C.C.E. training programmes.

In a country like India facing daunting problems of economic and technological development, the case for

¹ Barooch, P.P.: <u>Handbook on Child (With Historical Background)</u>. New Delhi. Concept Publishing Co. 1992 p. 253.

working out a local level— with national and regional advice and support — a viable delivery model for integrated or closely co-ordinated E.C.C.E. and family services and support is unanswerable, in terms of scarce resources of both finance and trained personnel. In this regard though the Integrated Child Development Services (I.C.D.S.) Scheme by the Department of Child Welfare of the Ministry of Education and Child Welfare is functioning to provide pre-school education in practice they are not satisfactory.

Another important pitfall that we need to avoid is not to adopt imported models without tailoring them to suit local conditions. That is why the educational activities taking place prior to the age of entry to the primary school system is perceived as mainly a device to accelerate the process of basic education. The result is a distortion of the E.C.C.E. approach to include systematic teaching of reading, writing and number, and the danger of this happening increases with the compulsory or permitted age of entry to primary school in India being at + 5.

The emphasis on the imaginative use of cheap, simple and locally available materials for play and stimulation is very essential. Finally, in the field of

¹ Heron, A.: Op. Cit. pp. 72-74.

learning, a joyous atmosphere is very essential for success.

Instead of making learning a dull and drab routine, efforts must be made to make it a pleasant and a pleasurable affair. A positive attitude needs to be cultivated right from the beginning in children.

Concept of Scholastic Readiness

There are certain abilities, attitudes and awareness which underlie and are a pre-requisite to the successful development of learning process in the young child. Educationists are concerned specially with those skills and abilities intended to help the child attain a state of 'learning readiness' when formal instruction can most profitably be undertaken.

Readiness is one of the technical terms that has a direct counterpart in the non-technical language of ordinary conversation. The concept is associated with maturational issues, development and environmental stimulation.

People are ready when the preparation is completed and it is necessary for them to meet expectations for performance. Educators are, ofcourse, concerned with readiness. They want to know when it is best to introduce

various curriculum tasks. It is generally assumed that learning occurs best when people are ready to learn and that without being ready little learning will occur. It also is assumed that a major component of readiness is maturation based on biological growth.

The readiness concept assumes relatively inflexible school requirements for learning in a context of free education for all children. It runs counter to contemporary efforts to provide for individual differences among children and to accept childen with a wide variety of handicapping conditions for instructions tailored to their capacity.

School readiness derives from the well established theory of child development that while development proceeds in an invariant direction the pace of development is highly variable. Well designed test batteries are expected to give trained educators or psychologists a secure basis for determining whether behavioural and chronological age are congruent. Since schools use chronological age as the main basis for entry, many children with uneven profiles are admitted who

¹ Husen. T, Neville, P.T. (Eds): The International Encyclopedia of Education. Vol VII. New York. Perganon Press 1985. pp. 4217-4219.

experience distress or failure.

The whole child and not just intellectual functioning is responsible for scholastic readiness. In fact, a socially immature but very bright child was designated as super immature by Gessel, as one likely to experience difficulty in schools. He attempted to define the whole child concept in terms of "adaptive behaviour" or those behaviour which reflect the child's capacity to initiate new experiences and to profit by past experiences which included perceptual orientational manual, verbal skills as well as intellect.

The child may be ready anywhere between the chronological ages of three and five or even later. First, he must know why people learn and go to school and believe that the reasons are worthwhile. Second he must be shown that people who go to school learn many things that are vital to them and that they have exciting adventures offered. The values of schooling should be made clear not by talking about them but by demonstrating to them. The child who is surrounded by adults who value schooling is likely to enjoy schooling too.

¹ Husen. T, Neville, P.T. (Eds) | Qp. Cit pp. 4217-4219.

Components of Scholastic Readiness

General Readiness: Children who have learnt to adjust to group living, to experience success in working with others, to engage in creative experiences, to solve problems, to listen with comprehension, to express themselves with increasing clarity are influenced to develop a desire to read, contribute much to their success in schooling.

General readiness is not confined to pre-school only. It is a concept that applies to every level of schooling. It refers to the factors that determine the probable success of the individual for a particular experience. These factors are frequently classified under four headings - Physical, mental, social and psychological. The factors that are of significance for readiness in schooling at the preschool level are important at every other level of development.

Physical Readiness:— The Physical readiness of the child is dependent upon his physical development his general health and lack of any defects. Such aspects of development as hearing, vision, speech, physical control, muscular co-ordination, effects of childhood disease and present health should be ascertained for meeting the demands of schooling.

Mental Readiness - Mental Readiness is his proficiency in skills such as following directions, interpreting illustrations, seeing likenesses and differences between words, discriminating between word forms, recognising sound elements, forms of objects, numbers and words and comprehending common words and common things. Fluency in oral expression and comprehension also form very important part of mental readiness.

Social Readiness - Social and emotional readiness of the child include his ability to establish contacts with other people, upon his ability to be content, away from his mother and upon his willingness to be part of a group. The child who is just developed but unhappy or ill-adjusted, who is shy and lacking in confidence has difficulty in learning with a group.

Psychological Readiness - Psychological readiness is closely associated with aspects of physical, mental and social development. Many preschoolers are ill-equipped emotionally to meet the demands of schooling. Evidence of withdrawal, hostility, restlessness, lack of concentration, negative reaction to others, negative reaction to new experiences, unwillingness to read, all indicate a lack of readiness. Parental rejection, a broken home, maladjustment to relationships in the home all contribute to feelings of insecurity that may result in a psychological unreadiness for pre-school.

Factors Influencing Scholastic Readiness :

Experiential background -In addition to all opportunities provided to the child greatly influence his readiness. Children differ widely in experience. They come from different background. Some have travelled whereas some others haven't gone anywhere. Some children have parents who read to them, others never see anything as much as a coloured paper. Although children are interested in play they are also interested in academic achievement But the expression what we are going to learn is Each day is rich with opportunities for learning many things that later give meaning to them. They bring meaning to things they experience. Everything a child sees, smells, hears, feels and tastes, he interprets in time of his own experience and draws upon it to bring meaning to them. wider the experience he has, the more opportunities work with others, to talk, to make things, to experiment, manipulate, to create, to solve problems, the more anxious he will be to add yet another method of extending his knowledge of life.

Aspects Involved in Scholastic Readiness - Scholastic Readiness means readiness of the child for schooling for academic learning and for this the child is expected to be ready in totality - physically, socially, emotionally and ofcourse intellectually too. The ability to leave the mother and be away with the peer, even though for a short duration

is as much important for schooling and learning as the ability to comprehend and conceptualize — the capacity to adapt, adjust and interact with the peer group is as much important as recognition and retention.

Both school readiness and scholastic readiness are almost synonymous but the researcher has adopted the scholastic readiness terminology since, it covers a broader spectrum and includes aspects beyond school readiness.

School readiness includes maturational or behavioural development equal to the school's entry and/or promotion requirements. Scholastic readiness includes the maturation or development not only equal to schools entry and promotion requirements but the learning process as such which is expected of him and adaptations at all levels in totality (scholastic readiness is, thus, defined as the child's attainment of a degree of physical, intellectual, social and emotional development sufficient to enable him to fulfill school requirements and to assimilate the curriculum content). Readiness is thus viewed as part of a total life perspective rather than one limited exclusively to schooling.

Research relating to child development has indicated that children differ widely in their readiness for learning. The harmony with the thesis that a child should go to learn, it is vital that an environment is created in which

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the invitation of schooling is clearly sensed. This will be possible when the child psychologically matures and develops aspects in every area viz., mental, emotional, social, psychological and general. Nothing is gained by forcing a child to go to school or learn before he evidences readiness. Infact, permanent damage may be done. On the other hand, since the purpose of schooling is to aid learning, every effort must be made to recognise readiness. To lessen the number of unhappy children who need special help, we must recognize children who are not yet ready for schooling so that intervention, enrichment and compensatory programmes can be planned suitably and offered to them.

operational definitions of scholastic readiness, there emerges a dual character of this definition, which refers to the child himself, on the one hand, and to the school and its requirements, on the other. This is an indication that much attention should be given both to the teaching material and to the methods used. School responsibilities are determined by the educational policy & by the existing curricula. There are gradations in these, while some schools expect the child to recite a few poems, orally learn the alphabets, numbers etc., and develop language and creative skills, some others expect the child to master reading, writing and arithmetic. Needless to say, all these can be expected only if the readiness is looked into and appropriate readiness activities

provided for the same. All the same, whatever the expectations, the child has to engage himself in all this in a group of peers guided by the class teacher in a specially designated place, to which the child must adapt socially, emotionally and physically.

No aspect of development can be discussed without taking into account the home environment and the parental influence. Freud had held that the home and family environment of the child holds the key to the individual's drives and goals, his attitude to life and the world, his general emotional reactions and specific emotional attachments during his adult life. So the home environment and its influence on the scholastic readiness of the child requires to be probed into.

Home Environment and its Relationship to Scholastic Readiness

What is it in the home environment that makes the child scholastically ready or unready? Are there any particular factors features present at home which are responsible for encouraging, enhancing, developing the child's readiness aspects? If identified, can something be done about it?

in the child's performance but home environment appears to have crucial significance. These mainly appear to centre around the parental competence or the degree to which child care practices followed at home provide adequate nurturance and support for growth and development.

Home: Though much used in day to day language, the term 'home' is rarely used scientifically and defined conceptually. It is nother difficult to find an appropriate definition of the same. The subjects of relation between home background and academic achievement have proved very difficult to handle because of the enormous complexity of the concept of 'home's. While there are several important aspects of homelife it is difficult to categorise them into suitable operational terms.

A home cannot be treated as a simple set of variables. It is not explained fully by socio-economic forces alone. Apart from its familiar overtones, it expresses the idea of domestic life and interests.

It was very difficult to spell out the salient

¹ Walberg, H., Marjoribanks, K.: Family Environment & Cognitive Development, Twelve Analytic Models. Review of Educational Research. 1976.45 7p, 327-352.

features of home. According to Hurlock (1987)₁ favourable home conditions include empathy, communications, respect for opinions of others, togetherness, independence, a gentle way of expressing disagreements and compromise. Unfavourable home climate includes friction, favouritism, feelings of inadequacy, poor adjustment and lack of emotional warmth. She further stated that other important factors for an individual child's development are ordinal position, sex, size of the family, family roles and family pattern.

The importance of early home experiences and parental attitudes in shaping the child's personality and behaviour even as an adult has been recognised since long. The role of the family includes teaching of the child's attitudes, norms and other attributes of his culture. Family circle is the most vital social unit in which both childhood and adult personality are rooted and nourished. Home environment appears to have crucial significance compared to all other factors. Behaviour, aspirations, achievements, aims and values depend on early experiences. Experiences during the 1st fundamental years of life can have deep and

¹ Hurlock, E.B.: Child Development. Auckland, McGraw-Hill Co., 1987. pp. 504-505.

² Mallya, I. : Parent Involvement to Enhance Child Growth & Development in Partnership with School. Paper presented in National Conference. I.A.P.E. 1986

lasting effects in the latter adjustments of life;

Research studies in psychology and anthropology in the few decades have shown the relationship between parental practices in upbringing of children and the behaviour patterns of adults. 2 According to Wadkar (1970)3, attitudes of the parents affect the child's development. It is found that the children from autocratic homes were rated by preschool teachers as more likely to fight and quarrel with other children, more inconsiderate to others and more insensitive to praise or blame than those from democratic homes.

Adler has emphasized how over-protection of the child by the parents, predisposes him to neurosis. Harsh parental attitudes were related to such personality problems as shyness, withdrawal and to behavioural problems such as truancy and stealing. Numerous studies have also reported that accepted children engaged themselves predominantly in

¹ Kumar, R. : Child Development in India. Vol I Ashish Publishing House. New Delhi. 1988. p. 181.

² Kamat, R. : <u>Development of Preschool Children & its Implications for Parents & Teachers</u>. Paper presented in the National Conference of I.A.P.E., 1986.

³ Wadkar, A.J.: Role of Home Background in Academic Achievement. Pune, Dastane Ramachandra & Co., 1989. pp. 8-9.

socially acceptable behaviour while rejected ones manifested a number of unacceptable behaviours. The accepted children are found to be good natured, considerate, cheerful, friendly, co-operative, emotionally stable and interested in work. The rejected children tend to show attention getting behaviour, become problems to school and tend towards delinquency. Inferiority, insecurity and low self-esteem accompany rejection. The rejected child either becomes hostile and aggressive or withdrawn and submissive. Ego strength of the child depends on his home.

The home also sets a pattern for the child's attitude towards people, things and institutions. Since the child loves the parents, he identifies himself with them, imitates their behaviour and learns to adjust to life as they do.

It is believed that in most cases, the causes of under achievement may be traced back to the early years of one's life. Early unfavourable home conditions and experiences are found to be responsible for personality difficulties later. These are in turn associated with under achievement. Maladjustment leads to misdirected abilities

¹ Kuppuswamy, B.: Child Behaviour and Development. New Delhi, Vikas Publishing House. 1980.ppx60-263

with their adverse effects on academic progress. Emotional blocks accompanied by feelings of inadequacy, inferiority and unsatisfactory human relationship prevent an individual from realising his potential.

Unfavourable conditions like broken homes and other family disruptions are also found in much higher proportion among the parents of under-achievers. Importance of parent child relations is also widely accepted. the physical factors like area of residence, socio-economic status, size and structure of the family and similar other factors indirectly affect parental aspirations, guidance, expectations, and, consequently the child's readiness and learning.......

Development of Readiness: If readiness is so important for learning, a pertinent question that arises is whether Readiness can be promoted, developed, enchanced? If school performance is considered to be closely influenced by the child's readiness it is imperative then that efforts are made to enhance it. Again, in a country where a sizeable number of the population belongs to the disadvantaged class and from where obviously children are going to enter school lacking

¹ McGowan, R.J., & Johnson, A.C.: The Mother-child Relationship & Other Antecedents of Childhood Intelligence - A Causal Analysis <u>Child Development</u> 55, (3). pp. 810-820.

the necessary readiness to take up tasks expected of them, it is but of paramount importance that developing readiness programmes be emphasized.

Earlier, readiness was viewed purely as a product of maturation and the experts felt that introduction of any learning task must match with the child's readiness and one must wait till the child is ready.

Hurlock opined that Effectiveness of learning depends on proper timing". Regardless of how much effort children put into learning, they cannot learn until they are developmentally ready to learn. Importance of Readiness to learn - Regardless of how much stimulation children receive they cannot learn until they are developmentally ready to do so. This means that the necessary physical and mental foundations must be present before new abilities can be built on thems.

Piaget's work has made it possible for an adult to think on behalf of the child, and to appreciate what

¹ Hurlock, E.B.: Op. Cit. p. 29.

² Lapp, D., Flood, J.: QP, Cit. pp. 56-57.

³ Devadas, R.P., Jaya, N. : A Text Book on Child Development. Delhi. Macmillan India Ltd. 1987. pp. 6-8.

learning means to the child. The implication of the Piagetian theories is clear, that learning takes its own time, that it may be destructive to speed up learning or development.

The Readiness concept refers to the likelihood that the individual can make the response in which required. Readiness is dependent, in turn, on capacity (taken here to mean the limiting conditions set by the nature of the learners' physiological system) and on previously learned behaviour. Limitations due to capacity are considered to arise through the influence of heredity, maturational level and physical injury. Thus some behaviours, such as the solution of calculus problems, are considered to be beyond the capacity of the sub-human species, the mentally retarded, young children or persons with certain forms of brain injury.

Limitations on readiness which result from inadequate prior learnings need to be assessed. The important question of the basis for the failure to acquire the pre-requisite responses remains as when we predict that a student's reading skills are so poor that he is unlikely to acquire the responses required at the school level, then the question here is whether the lack of skill is due to lack of capacity or lack of opportunity to learn the skill.

Significant educational research has recently

shown from the demonstration that many responses acquired during first two or three years of life must be learned and that they require situations which facilitate such learning. Perhaps, educational experiences should be provided at these ages which would greatly facilitate typical school learnings. Though nursery school experience has not been shown to fulfil this function, providing suitable and appropriate programmes could probably fill the laguna in the Readiness of the child.

Readiness to learn is a process that requires the teacher to develop skills necessary to determine the degree of readiness of a particular pupil for a particular learning activity. One can specify without too much difficulty the skills that are needed in estimating readiness for reading and for a number of other activities.

Readiness is no longer considered a fixed attribute of the child but is relative to our ingenuity in presenting situations, constructing material to stimulate and facilitate understanding. "We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development".2

¹ Muralidharan, R.: Development of Pre-school Children in India. <u>Baroda Journal of Nutrition</u>. 9. pp. 336-340.

² Bruner, J.F.: <u>The Process of Education</u>. Cambridge. Harward University Press. 1966. p. 33.

The impressionable early years constitute the base from which attitudes, habits, values and later, abstract formal learning grow. If this foundation is firmly built upon comprehensive understandings of the young and understandings are reflected in the programmes, methods, and organisational patterns that are devised, it is a sound base for the future.

If substantial changes are to occur, the learning environment cannot be left largely to the child's initiative.

Readiness, thus, may be a maturational aspect but it is the environment that nurtures it and promotes it. Hence, a vicious circle gets established. The more the environmental stimulation and motivation— the more the development of Readiness in the child and his ability to absorb from his environment i.e. learn from the opportunities and experiences provided to him. Certainly, deprivation of learning opportunities can not only retard his readiness, but also not let many of the maturational aspects be seen in the child.

Compensatory/Readiness Programmes

This then brings us to the very significant point i.e. developing appropriate and suitable readiness

programmes to compensate children who lack the necessary environmental stimulation and also devise readiness programmes for the enrichment of readiness.

Hunti for example in the early sixties, came out with a lot of work on "Intelligence and Experience" which, on the basis of both human and animal studies, showed that the development of intelligence was based on the interaction between genetic potential and the quality of environment. This was soon backed by Bloom 2 when he stated that the rate of development, particularly intellectual development, was most rapid in the early years of life or that environmental enrichment or deprivation makes its maximum impact on the organism during the period of its most active growth. Side by side with their studies came the studies of Bernstein3 on English families. Smilanskils on Israelis4. Hess and Shipman's on American Negroes5 which showed distinct differences in child rearing patterns between

¹ Lilee, D.L. : <u>Op. Cit.</u> p.2.

^{2 &}lt;u>Ibid.</u> p.3.

³ B. Bernstein : Language and Social Class. <u>British Journal</u> of <u>Sociology</u>. 1960. pp. 271-276.

⁴ S. Smilanski : Evaluation of Early Education in Educational studies and documents, UNESCO, pp. 3-17 1961.

⁵ Hess, R.D. and Shipman, V. : Early Experience and the Socializations of Coordinates Modes with the Easteren. Child Development. 36 pp. 887-898. 1965, Do. umenzer es

the different socio-economic groups. It was seen that children from disadvantaged homes were not quite as wellequipped in cognitive verbal and attentional skills as compared to their relatively well-off counterparts at the point of school entrance and thus they started school with a All these studies advocated handicap. appropriate compensatory education programmes to help these children acquire the necessary skills for learning and adjusting in school. As a result came a large number of intervention studies which may be clubbed under the anti-poverty campaign "Head Start". 1 Deutsch's pre-school and Early titled Elementary Education Projecto, D.P. Weikart, Perry Pre-School Projects are some of the outstanding ones. Around the same time in United Kingdom the Plowden Education Commission was appointed. It recommended that facilities for Early Childhood education should be increased considerably and that play centres should be started to help a number of pre-school children. The U.S.S.R is another country where pre-school education is available to a vast majority of children. The Pre-school teachers in the U.S.S.R. are carefully trained and supervised, the curriculum

¹ S. Gray and R.A.Klaus : Early training project "An Experimental Pre-school Programme for Culturally Deprived Children", Child Development. 36 pp. 887-898, 1965.

² M. Deutsh: <u>Institute for Developmental Studies: Annual Report.</u> New York Medical College, New York, 1965.

³ Pre-School Intervention: A preliminary Report of the Perry Pre-school Project. Ann Arbor, Campus Publishers 1970,

is spelt out in detail and the best buildings are made available for the pre-schools.

Pre-school years are thus considered crucial in all these different cultures. The foundation for late development is laid at this stage and any damage at this stage is likely to be irrepairable.

Pre-school compensatory programmes grew out to help low children reverse the cumulative achievement differences that occurred when their achievement was compared with that of middle socio-economic level A change towards greater emphasis on achievement and intellectual development was noted among the experimental pre-school compensatory programmes compared with traditional programmes. A variety of specific models of early childhood education was developed, based on different views of child development, including the deliberate use of television as an intervention procedure. Parent education attained a renewed visibility as a means of addressing the problems of low socio-economic level children. The compensatory programmes have identified a variety of ways to adapt educational experiences to help young children improve their performance in school-related bahaviours, particularly, for those coming from economically disadvantaged section of society.

Since the year 1980 in India too concerted

efforts, though negligible, are being made to develop Compensatory and Enrichment programmes at M.S. University of Baroda, Department of Child Development, studies and experiments have been conducted on Home Stimulation, Parent Involvement and so on.

Assessment of Scholastic Readiness:

Investigators in psychology and education have worked for many years to develop methods of assessing children's readiness and abilities. In India, somehow, there are hardly any methods devised except a few attempted at the M.S. University, Baroda. But, these again are on a small scale and not validated on a large sample. Abroad, ofcourse, there are several screening devices for measuring readiness which have been listed in the following chapter. These readiness devices can be administered both before and after children start school. Most of these try to identify, by means of pre-kindergarten battery, the children who will have later difficulty in learning in school. Some of them are also in use to enable teachers to form homogeneous groups, to identify children whose skills and abilities that need to be

¹ Stevenson, W.H., Parker, Wilkinson, A. : Longitudinal Study of individual differences in Cognitive Development and Scholastic Achievement - <u>Journal of Educational Psychology</u> 1976, Vol 68. No. 4, 377-400 University of Michigan.

improved through remediation or compensatory education programmes. In general, readiness tests are designed to measure current performance levels in areas important to children's subsequent academic development (i.e. to predict later achievement).

But, what is imperative in these assessment measures is that they must be used mainly for purposes of diagnosis. The ultimate question while administering the devices should be not whether the child is ready or not ready but rather — "In what ways is the child ready and in what ways he is not". It should be only an indicator of the child's readiness.

A Word of Caution.

However, the screening devices need to be used very cautiously in identifying children who need extra help. Because prediction is imperfect, (since there are improvements with age, environmental influence etc.) some children will be mistakenly identified and some who should have been identified will be missed out.

¹ Oakland: Prediction Validity of Readiness tests. <u>Journal</u> of <u>Educational Psychology</u> Vol. 70, No.4. pp. 74-582. University of Texas and Austin.

Can there be flaws in the very logic of preschool screening? Now, can it be determined whether an young child is going through a stage or showing early signs of a long-term problem? We must be aware of the effects of labelling or categorising children at an early age because parents and teachers may have lower expectations of an unready child, which is confirmed by his or her age, typical problems and eventually result in a self-fulfilling prophecy.

These are the questions that puzzle parents. professionals and policy makers. In theory, identification and early intervention for school problems appear to constitute a perfectly sound and responsible Resources are devoted to "Dunces of perfection" than "Pounds of cure". Children are strengthened instead of weakened, professionals feel rewarded instead of frustrated and parents get assisted instead of blamed. However, this model brings upon certain critical assumptions. The first is that we do not know how much of this early identification will produce significant positive effect in it will help children who otherwise, may have faced problems. Secondly, not all children showing signs of early difficulties prove to have later problems. Problems may lessen or disappear over time just as they may increase or appear.

At the same time professionals in schools,

clinics and agencies who come in contact with children who are struggling or failing in school often express regret that something should be done for these children sooner. If screening devices are used cautiously and discreetly and educational enrichment experiences (like, motoric or cognitive stimulation, to teach social skills or adaptive behaviour, to foster positive attitudes towards learning, to improve the home environment and parenting skills) provided to those who need, surely it would go a long way in helping every child to be successful in scholastic performance.

The future concern, hence, should be not on screening devices but how to make use of it's results to enhance the development of children.

Need of the Study:

All children do not enter school at the same level of understanding and with the same capabilities. Though chronologically, they may be at the same age level, there are some who are more advanced in the development, understanding, knowledge and capacities and are much better equipped to meet the expectations, requirements and demands

Stevenson, W. H., Parker, T., Wilkinson, A.: Predicting Achievement. <u>Journal of Educational Psychology</u>. 1976. Vol 68. No.4 . pp. 377-400.

of schools. There are others who may be just above average and somehow manage to scrape through. But there are a few who may have to struggle so much that they may, ultimately, lag behind and become school failures and dropouts.

There is need to identify such specific needs of children which are not being met in the existing educational system. Since the child's future school success is strongly determined by his school readiness, a screening device which would help to point out deficits is necessary. It is very essential to provide adequate environment for these children, so that the differences could be levelled and an equal start ensured for all. It is imperative to define criteria for school readiness and find adequate measurement techniques. This will indicate what percentage of children are mature enough to take on school responsibilities. This will aid the school authorities to concentrate ways of reorganising educational functions at the beginning of school instruction so that an equal start is provided for all.

Thus, to combat the problem of children who have initial difficulties in coping with the expectations of the school there is need to work out some strategy. It was felt that these children were not ready for schooling, not prepared for the tasks to be performed for academic learning. It was necessary, then, to investigate into the whole phenomenon. How is it that some children go through

schooling and learning smoothly and swiftly whereas there are others who face innumerable impediments and lag behind in most of the tasks.

It does not imply, however, that if the child is not ready, his entry into school be delayed until he is ready. One magging implication of the word"readiness" is that if a child is not "ready" his entry into school should be delayed until he is ready. This is a deplorable conclusion, since, it amounts to depriving help to the child who is most in need of help, on the basis of the false assumption that "readiness" depends merely on the passage of time and not on the experiences of the child during that time. If available evidence suggests that a child is not ready for a normal kindergarten, the most direct solution would be to provide special compensatory experiences to help him become ready. Recent data 1 from pre-school research have convincingly demonstrated that high quality pre-school programmes can have a profound effect in helping young children overcome readiness problems. Enrichment and compensatory programmes have shown that appropriate and suitable programmes designed to meet the deficiencies in the environment can help the child develop better. If the development areas that are specific to school learning are considered properly much could be done to promote learning.

¹ Lapp, D., Flood. J. : Op. Cit pp. 58.

For this, then, none other than knowledge of the readiness of the child in the area will help.

Ofcourse, there have been conflicting views on whether the 'Readiness' of the children is maturational or environmental. Bruner and Hunt claim that any learning can be induced if the instructions can be adapted to the child's level. On the other hand maturationists like Gessel, Issacs and Freud including Piaget are of the view to let cognitive ability to develop as it would with maturation.

Piaget's work has made it possible for an adult to think on behalf of the child and to appreciate what learning means to the child. The implication of Piagetian theories is clear, that learning takes its own time, that it may be destructive to speed up learning or development.

Readiness though immsically based on maturational aspects is also very closelly influenced and promoted by environmental experiences provided to the child. Children start with inborn capacities but the environment in which they grow-up further nurtures their capabilities. Babies need to have a stimulating environment and be motivated to further their perception.

¹ Taraporewala, R., Chugani, N.: A Handbook for Pre-School Teachers. A publication of Indian Association for Pre-School Education (Bombay Branch). pp.1.

Fortunately, it is also true that there is a oreat deal of resilence in individuals. Though deprivation cause slowing down of development, yet, when normalcy is restored, the child soon makes up for the deficit, provided the deprivation is not continuous and not too severe. By and large, there is enough adaptability in the child by which he/she marks out his/her own strategies to face and overcome the deprivation effectively which means that schools could do a lot to build up the child's readiness. But, more insight into it is definitely required. Majority of children need such efforts on the part of the schools to promote readiness since many come from disadvantaged homes and underprivileged settings. In this context, again, the need for the study was immensely felt to probe into the basics of the Scholastic Readiness of Pre-school Children to ensure the intricacies involved in it.

Either way, the research will be of immense value since, whether Maturation or Environment, the Readiness knowledae would enable devising of such appropriate programmes which would take into consideration the maturational level at which children are and the environmental opportunities that could promote readiness. Hence, in the context of the present conditions of pre-school education, that of underdeveloped programmes and a sizeable number of disadvantaged children to be catered to, the study would enable to meet problems envisaged at levels.

Statement of the Problem

"An Investigation into the Scholastic Readiness of Pre-School Children"

The variables of the study are:

- 1. Scholastic Readiness
- 2. Academic Achievement
- 3. Home Background
- 4. Personal Abilities

Definitions of the terms

Readiness:

Readiness has been defined as "Physiological condition in which the individual is in a state of preparation to respond". It is a developmental level at which a child has matured sufficiently and had sufficient experience for learning to begin. Developmental factors of importance are mental, age, language, interests, etc.

According to C.V. Good₂ "Readiness is willingness, desire and ability to engage in a given

¹ Page, G.F., Thomas, J.B. : <u>International Dictionary of Education</u>. New York. Nicholas Pub. Co. 1978. p. 284.

² Good, C.V., Markel, W.R., (Ed): Dictionary of Education. New York, McGraw Hill Book Co. Inc 1973. p. 472.

activity, depending on the learner's level of maturity, previous experience and mental emotional state". The level at which an individual has the capacity to undertake the learning of a specified subject of study or the age at which the average group of individuals have the specified capacity (such as reading readiness) Readiness; Ausubel proposed, is 'the adequacy of existing capacity in relation to the demands of a given learning task".

The notion that a person needs to be in a state of preparedness (i.e. not just ready or willing, but also mentally and physically able). The prerequisite abilities may depend not simply on prior learning but also on degree of maturation?.

Readiness has been defined as a state or condition of the person that makes it possible for him to learn or undertake a given task. Readiness depends upon the learners' level of maturity, previous experience and mental

¹ Ausubel, D.P.: <u>Viewpoints from Related Disciplines Human Growth and Development</u>. Teachers College Record LX (February, 1959), pp. 245-254.

² Rowntree, D.: A <u>Dictionary of Education</u>. London. Harper & Row Publishers. 1981. p. 244.

³ Biswas, A., Aggarwal, J.C.: <u>Encyclopaedic Dictionary & Directory of Education with special reference to India.</u>
Vol I. p. 135.

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and emotional set. It is a composite of many qualities and conditions and differs from one learning task to another.

Scholastic Readiness (S.R.)

Scholastic Readiness is defined as the child's attainment of a degree of physical, intellectual, social and emotional development sufficient to enable him to fulfill school requirements and to assimilate the curriculum content.

Scholastic Readiness is 'Readiness of the child for the learning process as a whole including the maturational and developmental aspects equal to school's entry and promotional requirements.

Pre-School Child (P.S.C.)

According to Rowntree a preschool child who is not yet old enough to begin attending school.

Pre-school child is a child in the age group of 2-1/2 to 5-1/2 years - at the beginning of which the child is usually admitted to a nursery school. It is also referred to as the 'Farly childhood Stage".

¹ Rowntree, D. : <u>Op. Cit</u> p. 225.

Pre-School Education (P.S.E.)

Pre-school education is an 'Early Childhood programme' emphasizing the training, education and total development of the child. It generally connotes education at the prekindergarten level but also refers to any educational experiences provided by a school at the pre-primary and primary levels. A Pre-primary school is a separately arranged and administered elementary school for pupils in the year or years preceeding the 1st grade. This may include pupils in the prekindergarten years or grades. It is a beginning group or class enrolling children younger than five years of age and organised to provide educational experiences under professionally qualified teachers in cooperation with parents during the year or years prior to entry into elementary school.

The method and theory of guiding young children in a group generally refers to education demonstrated in nursery schools. Emphasis is placed on developing capacities of the individual and on helping him to meet his problems.

This general term embraces the different types

Shafritz, J.M., Koeppe, R.P., Saper, E.W. : The Facts on File. <u>Dictionary of Education</u>. N.Y. Facts on File, 1988. p. 362.

of education available for the under-fives and includes nursery schools, nursery classes and pre-school play groups. In India, there is no statutory obligation for local education authorities to provide pre-school education. Hence there is lack of awareness of importance of pre-school education and resulting neglect of the same.

. Rowntree defines it as "Any organised education prior to primary education — Education for children to prepare them for school life and learning". The emphasis is on providing a righly stimulating environment and opportunities for social and language development.

Education related to the training and development of children before the beginning of formal schooling comprises of preschool education.2

Academic Achievement (A.A.)

Knowledge obtained or skills developed in the school subjects, usually designated by test scores or by marks assigned by teachers or by both, comprises of Academic

¹ Rowntree, D. : Op. Cit. p. 225.

² Biswas, A., Aggarwal, J.C.: Op. Cit. p. 127.

Achievement.1

The scores Obtained by the individual child in the academic performance is taken as A.A. The school conducts two Unit Tests (U.T.) one in each term and two exams at the end of the semester (S.E.). A.A. comprises of three sub categories - Language Scores (L.S), Number Work (N.W.) and General knowledge (G.K.). Each of the subcategory carries 100 marks totalling to 300 on the whole.

Home Environment (H.E.)

According to the Chambers Twentieth Century Dictionary, Home is defined as the habitual abode or residence of one's family or the scene of domestic life, with it's emotional associations.

Home has been defined as the place where a person or family lives - one's own home or dwelling place. 2

Environment is a general term designating all the objects, forces and conditions that affect the

¹ Good, C.V., Markel, W.R., (Ed): Op. Cit. p. 6.

² Barnhart, C.L., Barnhart, R.K.: The World Book Dictionary. Vol I. Chicago. Doubleday and Co. Inc. 1987. pp. 10-11.

individual through such stimuli as he is able to recieve. 1 Environment is all of the surroundings, things, conditions and influences affecting the growth and development of living things. A child's character is greatly influenced by his home environment. 2

According to Diswas & Aggarwal "Environment comprises of all the objects conditions and factors around an individual having the power to influence him". 3

H.E was the environment and/or the conditions in which the child was growing up. It comprised of two categories - Home background (H.B) and Parental Involvement (P.I.). Home background was the background of the child's home which constituted - Parental education, their occupation, socio-economic status, number of siblings and the residential area.

The socio-economic conditions of the family, it's type and the literacy levels and the occupations of the parents of the child goes to make up the home background.

¹ Good, C.V., Markel, W.R., (Ed): Op. Cit. p. 214.

² Barnhart, C.L., Barnhart, R.K. : Op. Cit. p.708.

³ Biswas, A., Aggarwal, J.C. : Op. Cit. p. 61.

P.I. was the involvement of the parents in the child's growth and development — what type of interaction and involvement is offered to the child. This P.I. was measured through 6 broad aspects which had 10 sub-aspects in it. The 6 broad aspects were (1) Attitude to Child Rearing, (ii) Actual Handling, (iii) Inter personal relations, (iv) Expectations of Parents, (v) Facilities provided and (vi) Preparation of the Child.

Personal Abilities (P.A.)

Ability has been defined as 'The present power to perform a physical or mental function. An individual's potential to perform.

Ability is the actual power present in an organism to carry to completion any given act or to make adjustments successfully. $_2$

Biswas defines ability as "The power present in an organism to perform an act, physical or mental, or to make adjustments successfully. Generally speaking ability is the actual power in a person to perform any work.

¹ Shafritz, J.M., Koeppe, R.P., Saper, E.W. : Op. Cit. p.1.

² Good, C.V., Markel, W.R., (Ed): Op. Cit. p. 1.

³ Biswas, A., Aggarwal, J.C. : Op. Cit. p. 1.

The child's abilities in 'Other activities' (O.A.) and Self Attributes (S.A.) were included in this.

Other activities which consisted of painting, drawing, creative work, clay and puzzles were taken up to see how far a child is proficient in them. These activities were conducted in the school as co-curricular activities.

The self attributes like Personal Development, Mental Abilities, Social Skills and Personality Traits were graded by the teachers which were maintained in the Teacher Rating Scale.

Aims of the Studys

The aims of this study can be classified into four broad categories.

Firstly, to investigate into the concept of scholastic readiness of Pre-school children - what is it that constitutes S.R., what contributes to S.R. and what are the components of S.R.

Secondly, the aim was to prepare a screening device to measure S.R. and use the tool to compare children with different levels of S.R.

Thirdly, to probe into the Home Background and

Parental Involvement and their relative influence on S.R. and A.A.

Fourthly, to make suggestions to identify unreadiness and suggest ways of enhancing scholastic readiness.

Objectives of the Studys

- 1. To study and research in the area of S.R.
- 2. To identify areas and aspects favourable for S.R.
- To design an appropriate screening device to measure
 S.R. of P.S.C.
- 4. To find out whether screening aids in identifying children who are scholastically not ready.
- 5. To find out whether screening aids in pinpointing specific areas in which the child is scholastically unready.
- 6 To enlist the components of S.R.
- 7. To indentify factors responsible for S.R.
- 8. To study the relationship between S.R. and A.A.
- 9 To study the effect of S.R. on A.A.
- 10. To find the effect of S.R. on adjustment to school.
- 11. To compare children with different levels of S.R. on A.A.
- 12. To compare children with different levels of A.A. on S.R.

- 13. To study H.B. and its influence on S.R. of children.
- 14. To study H.B. and its influence on A.A. of children.
- 15. To study the effect of P.I. in their children on S.R.
- 16. To study the effect of P.I. in their children on A.A.
- 17. To study the effect of P.Int in their children on S.R.
- 18. To study the effect of P Int in their children on A.A.
- 19. To find out the differences in A.A. of children with different levels of S.R.
- 20. To find out the differences in S.R. of boys and girls.
- 21 To find out the differences in A.A. of boys and girls.
- 22. To find out the differences in S.R. of P.S.C. from different groups.
- 23. To suggest enrichment programmes that may help children who are ready.
- 24. To suggest intervention and compensatory programmes for children who are unready.

Assumptions

- 1 Readiness of the child is basic for any learning.
- 2. Unready child will have difficulty in learning
- 3. Both Maturational and enmvironmenmtal aspects influence readinesss.
- 4. Children from under priviliged situation and disadvantaged homes will lack readiness.
- 5. Readiness can be promoted and enhanced.

- 6. The earlier one can effect a plausible intervention the better.
- 7. Pre-school stage is the best period for promoting Readiness.
- 8. With appropriate programmes, unready child can be brought on par with the ready child.
- 9. Children are by nature malleable and their growth and development can be modified extensively in a variety of directions with the knowledge of readiness.
- 10. This manipulation of experiences will influence his total development.
- 11. The provision of qualitatively sound experience can modify or compensate for basic lacks in the child's environment. Such lacks define the basis on which experiences can be built.
- 12. Since school's performance is vital to child's life, children who are not ready are causing both personal and national loss.
- 13. Home background is crucial to readiness of the child.
- 14. Parental Involvement and interest in child rearing is extremely important for childs readiness.
- 15. Conductive environment in the form of stimulation and motivation is basic to readiness.

Hypotheses:

A Group of Hypotheses

Hypotheses of Relationship

B Group of Hypotheses

Hypotheses of Difference

A.A. - S.R.

C Group of Hypotheses

Hypotheses of Difference in

S.R. - Boys and Girls

A.A. - Boys and Girls.

D Group of Hypotheses

Hypotheses of Difference

S.R. - Ace

E Group of Hypotheses

Hypotheses of Difference

D.A. - S.R.

F Group of Hypotheses

Hypotheses of Relationship

S.R.-T.R.

6 Group of Hypotheses

Hypotheses of Difference

S.R.-H.B.

H Group of Hypotheses

Hypotheses of Difference

S.R. - P.I.

I Group of Hypotheses

Hypotheses of Difference

A.A. - P.I.

J Group of Hypotheses

Hypotheses of Difference

S.R. - P. Int

A.A. - P. Int.

A Group of Hypotheses of relationship.

- A 1. a) There is no significant relationship between S.R. and A.A. of P.S.C..
 - b) There is no significant relationship between S.R. and A.A. of P.S.C. at 1st U.T..
 - c) There is no significant relationship between S.R. and A.A. of P.S.C. at ist S.E..
 - d) There is no significant relationship between S.R. and A.A. of P.S.C. at 2nd U.T..
 - e) There is no significant relationship between S.R. and A.A. of P.S.C. at 2nd S.E..
- A 2. a) There is no significant relationship between M.S. and A.A. of P.S.C..
 - b) There is no significant relationship between M.S. and A.A. of P.S.C. at 1 st U.T..
 - c) There is no significant relationship between M.S. and A.A. of P.S.C. at 1 st S.E..
 - d) There is no significant relationship between M.S. and A.A. of P.S.C. at 2nd U.T..
 - e) There is no significant relationship between M.S. and A.A. of P.S.C. at 2nd S.E..

- A 3. a) There is no significant relationship between C.S. and A.A. of P.S.C..
 - b) There is no significant relationship between C.S. and A.A. of P.S.C. at 1^{8t} U.T..
 - and A.A. of P.S.C. at 1st S.E..
 - d) There is no significant relationship between C.S. and A.A. of P.S.C. at 2nd U.T..
 - e) There is no significant relationship between C.S. and A.A. of P.S.C. at 2nd S.E..
- A 4. a) There is no significant relationship between P.S. and A.A. of P.S.C..
 - b) There is no significant relationship between P.S. and A.A. of P.S.C. at 1St U.T..
 - c) There is no significant relationship between P.S. and A.A. of P.S.C. at 1 S.E..
 - d) There is no significant relationship between P.S. and A.A. of P.S.C. at 2nd U.T..
 - and A.A. of P.S.C. at 2nd S.E..
- A 5. a) There is no significant relationship between C.E.L. and A.A. of P.S.C..

- b) There is no significant relationship between C.E.L. and A.A. of P.S.C. at 1st U.T..
- and A.A. of P.S.C. at 1St S.E..
- d) There is no significant relationship between C.E.L. and A.A. of P.S.C. at 2nd U.T..
- e) There is no significant relationship between C.E.L. and A.A. of P.S.C. at 2nd S.E..

B. Group of Hypotheses of Difference.

- B 1. a) There is no significant difference in the A.A. of P.S.C. with different levels of S.R.
 - b) There is no significant difference in the A.A. of P.S.C. with different levels of M.S.
 - c) There is no significant difference in the A.A. of P.S.C. with different levels of C.S.
 - d) There is no significant difference in the A.A. of P.S.C. with different levels of P.S.
 - e) There is no significant difference in the A.A. of P.S.C. with different levels of C.E.L..
- B 2. a) There is no significant difference in the L.S. of P.S.C. with different levels of S.R.

- b) There is no significant difference in the L.S. of P.S.C. with different levels of M.S.
- c) There is no significant difference in the L.S. of P.S.C. with different levels of C.S.
- d) There is no significant difference in the L.S. of P.S.C. with different levels of P.S.
- e) There is no significant difference in the L.S. of P.S.C. with different levels of C.E.L..
- B 3. a) There is no significant difference in the N.W. of P.S.C. with different levels of S.R.
 - b) There is no significant difference in the N.W. of P.S.C. with different levels of M.S.
 - c) There is no significant difference in the N.W. of P.S.C. with different levels of C.S.
 - d) There is no significant difference in the N.W. of P.S.C. with different levels of P.S.
 - e) There is no significant difference in the N.W. of P.S.C. with different levels of C.E.L..
- B 4. a) There is no significant difference in the G.K. of P.S.C. with different levels of S.R.
 - b) There is no significant difference in the G.K. of P.S.C. with different levels of M.S.

- c) There is no significant difference in the G.K. of P.S.C. with different levels of C.S.
- d) There is no significant difference in the G.K. of P.S.C. with different levels of P.S.
- e) There is no significant difference in the G.K. of P.S.C. with different levels of C.E.L..

C Group of Hypotheses of Difference.

- C 1. a) There is no significant difference in the S.R. of boys and girls.
 - b) There is no significant difference in the M.S. of boys and girls.
 - c) There is no significant difference in the C.S. of boys and girls.
 - d) There is no significant difference in the P.S. of boys and girls.
 - e) There is no significant difference in the C.E.L. of boys and girls.
- C 2. a) There is no significant difference in the A.A. of boys and girls.
 - b) There is no significant difference in the A.A. at 1st U.T. of boys and girls.

- c) There is no significant difference in the A.A. at 1st S.E. of boys and qirls.
- d) There is no significant difference in the A.A. at 2nd U.T. of boys and girls.
- e) There is no significant difference in the A.A. at 2^{nd} S.E. of boys and girls.
- C 3. a) There is no significant difference in the L.S. of boys and girls.
 - b) There is no significant difference in the L.S. at i^{st} U.T. of boys and girls.
 - c) There is no significant difference in the L.S. at $i^{\rm st}$ S.E. of boys and girls.
 - d) There is no significant difference in the L.S. at 2^{nd} U.T. of boys and girls.
 - e) There is no significant difference in the L.S. at 2^{nd} S.E. of boys and girls.
- C 4. a) There is no significant difference in the N.W. of boys and girls.
 - b) There is no significant difference in the N.W. at $\mathbf{1}^{\mathbf{st}}$ U.T. of boys and girls.
 - c) There is no significant difference in the N.W. at $i^{\rm st}$ S.E. of boys and girls.

- d) There is no significant difference in the N.W. at $2^{\mbox{nd}}$ U.T. of boys and girls.
- e) There is no significant difference in the N.W. at 2nd S.E. of boys and girls.
- C 5. a) There is no significant difference in the G.K. of boys and girls.
 - b) There is no significant difference in the G.K. at 1^{st} U.T. of boys and girls.
 - c) There is no significant difference in the G.K. at 18t S.E. of boys and girls.
 - d) There is no significant difference in the G.K. at 2^{nd} U.T. of boys and girls.
 - e) There is no significant difference in the G.K. at 2^{nd} S.E. of boys and girls.

D Group of Hypotheses of Difference

- D 1. a) There is no significant difference in the S.R. of P.S.C. from different age groups.
 - b) There is no significant difference in the M.S. of P.S.C. from different age groups.
 - c) There is no significant difference in the C.S. of P.S.C. from different age groups.

- d) There is no significant difference in the P.S. of P.S.C. from different age groups.
- e) There is no significant difference in the C.E.L. of P.S.C. from different age groups.

E Group of Hypotheses of Difference

- E a) There is no significant difference in the O.A. of P.S.C. with different levels of S.R.
 - b) There is no significant difference in the O.A. of P.S.C. with different levels of M.S.
 - c) There is no significant difference in the D.A. of P.S.C. with different levels of C.S.
 - d) There is no significant difference in the D.A. of P.S.C. with different levels of P.S.
 - e) There is no significant difference in the O.A. of P.S.C. with different levels of C.E.L..

F Group of Hypotheses of Relationship

- There is no significant relationship between S.R. of P.S.C. and T.R. on S.A.
- There is no significant relationship between S.R. of P.S.C. and T.R. on P.D.
- 3. There is no significant relationship between S.R. of P.S.C. and T.R. on M.A.

- 4. There is no significant relationship between S.R. of P.S.C. and T.R. on S.S.
- There is no significant relationship between S.R. of P.S.C. and T.R. on K.E.

G Group of Hypotheses of Difference

- There is no significant difference in the S.R. of P.S.C. with different levels of P.E.
- There is no significant difference in the S.R. of
 P.S.C. with different levels of M.E.
- 3. There is no significant difference in the S.R. of P.S.C. with different levels of F.E.
- 4. There is no significant difference in the S.R. of P.S.C. with different levels of M.O.
- 5. There is no significant difference in the S.R. of P.S.C. with different levels of F.O.
- There is no significant difference in the S.R. of P.S.C. with different levels of S.E.S.
- 7. There is no significant difference in the S.R. of P.S.C. with different N.S.
- 8. There is no significant difference in the S.R. of P.S.C. from different R.A.

H. Group of Hypotheses of difference

- There is no significant difference in the S.R. of P.S.C. with different levels of P.I.
- There is no significant difference in the S.A. of P.S.C. with different levels of A.C.R.
- 3. There is no significant difference in the S.R. of P.S.C. with different levels of A.H.
- There is no significant difference in the S.R. of P.S.C. with different levels of E.P.
- There is no significant difference in the S.R. of P.S.C. with different levels of I.P.R.
- There is no significant difference in the S.R. of P.S.C. with different levels of F.P.
- 7. There is no significant difference in the S.R. of P.S.C. with different levels of P.C.

I. Group of Hypotheses of Difference

- There is no significant difference in the A.A. of P.S.C. with different levels of P.I.
- There is no significant difference in the A.A. of
 P.S.C. with different levels of A.C.R.

- 3. There is no significant difference in the A.A. of P.S.C. with different levels of A.H.
- 4. There is no significant difference in the A.A. of P.S.C. with different levels of E.P.
- 5. There is no significant difference in the A.A. of P.S.C. with different levels of I.P.R.
- 6. There is no significant difference in the A.A. of P.S.C. with different levels of F.P.
- 7. There is no significant difference in the A.A. of P.S.C. with different levels of P.C.

J Group of Hypotheses of difference

- There is no significant difference in the S.R. of children with different levels of P.Int.
- 2. There is no significant difference in the A.A. of children with different levels of P.Int.

Scope of the Studys

The study attempts to investigate into the S.R. of P.S.C. and to find out what are the aspects involved in it and to enlist the components that comprise it.

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It attempts to probe into the relationship between S.R. and school performance - whether any kind of readiness is a pre-requisite for better school performance, and if so, what are the factors associated with children who possess it or lack it. Simultaneously, it also deals with the possibility of screening the readiness aspect which may ultimately aid schools in designing a suitable curriculum and devise enrichment/compensatory programmes to enhance the readiness aspect.

While probing into the ampects of S.R. and its relationship with A.A. efforts are also made to study the differences that exist between boys and girls and between children of different age groups.

Home environment is another area of inquiry where both the Home Background (H.B.) and the Parental Involvement (P.I.) are explored in detail. These give a complete idea of the influences and factors that are working on the child and how they affect the readiness as such.

The child's 'Personal Abilities' (P.A.) are also scrutinised, comprising of his ability in 'Other Activities' (O.A.) and 'Self Attributes' (S.A.) rated by the teacher in the 'Rating Scale'.

Thus, the scope of the study includes the investigation of the S.R. in relation to the P.S.C. in totality.

Limitations of the Study:

As it is difficult to collect information at the pre-school level, the study suffers from limitations in this sphere. These shortcomings are mainly due to difficulties experienced in screening children. Some of the children were so moody, anxious and apprehensive that it was a herculian task to make them feel comfortable and relaxed.

Getting information at school level too was a problem. Even though all the schools visited agreed to give data on the procedure adopted to screen children, at the first instance, but, despite repeated requests by the researcher some schools evaded giving responses to the type of questions asked and one school even refused flatly to cooperate. Few schools could not give full information due to non-availability of organised methods followed.

The interviews of parents too suffered due to several reasons -the non attendance of parents, apprehension on their part about answering questions truthfully, associating the interview with the promotional procedures of

the child and so on. Lot of coaxing and assurances were required to make the parents relax and discuss objectively and truthfully.

The success of the study depended greatly on the right attitude of parents and schools in giving true information. Most of them initially felt it was testing their type of work and handling and therefore, tended to be apprehensive in discussing the true picture and it required a lot of persuasion and goading to make them discuss.

The Scholastic Readiness Device has taken into consideration all basic features and pre-requisites of learning, whereas achievement scores have concentrated on cognitive functioning only. Since memory and reproduction is very high at this stage, perhaps, parents and teachers have been able to tap these which has contributed to moderate reliability of the tool.

Significance of the Studys

This study is a modest effort by the researcher to open avenues in understanding young children and their education. Any work in the area of 'Scholastic Readiness' is sure to promote a deep understanding of the factors that help the children for readiness.

It will help the educators because the findings would enable them to understand the readiness aspect and how relevant it is to the phenomenon of learning and schooling.

From the practical point of view the present study may help the authorities to plan and design programmes for young children, which may in turn enhance the learning process of children.

It will also help the policy makers to design and devise programmes which will aim at compensating the lack of environmental stimulation.

Even a marginal but a sure and definite increase in the achievement motives would be of great help.

Knowledge of readiness would also help the educator to provide rich educational experiences.

The study would help schools to design curriculum and content suitable for the group that they are catering and not expect all children to meet the demands of the same syllabus. It will help reduce the number of children who fill remedial classes and also lessen school failures. In fact, it can give a complete twist to the entire approach to education and to the learning process — not to compel and force children to do certain tasks and label those children who cannot do it.

The study will also help educators in guiding the disadvantaged, and in developing their readiness right from the pre-school stage. This study would aid even parents in providing a stimulating climate at home and thus help children to develop necessary readiness for optimum learning.

The teachers would gain a deep understanding of the aspects involved in 'Scholastic Readiness' and, perhaps, not just cater to the children at their level of understanding, but, in fact, plan programmes for infusing and inculcating the necessary readiness in children who lack it.

Knowledge of readiness would enable the teacher

to be aware of the limiations of the child's level of intelligence.

Enrichment programmes can be worked out, which would enhance the existing level of 'Scholastic Readiness'.

Identification of the ready and unready children would enable the teacher to plan programmes at their level.

It will help the teacher to support, praise and to find tasks for the child that are within the competency and minimising the difficulties that may be encountered.

It will help in avoiding frustration in children, parents and educators.

It goes without saying that success in any task or activity depends to a great extent on the readiness of the person to undertake the task. School success, too, depends largely on the readiness of the child and on his ability to meet demands of school. Strangely, this readiness not only leads to school success, but leads to emotional satisfaction and maturity. Being able to meet demands set by the school he develops a positive self conept and is content with his ability to perform. Hence, this study would be of great significance not only in throwing light on readiness and school success but also in fact, on the total development and well being of the child.

It has been demonstrated beyond doubt that the intellectual faculties appearing between the ages of 2 and 7 open vast possibilities of influencing a child's counitive processes and his overall intellectual development. If no proper educational influence is exerted in this period, there is little chance of ensuring full development later. Gifted children are most often those who are lucky enough brought up in favourable environment that enables them utilise the optimum learning period. Slow learners, on the other hand, proved to be those brought up in a less favourable environment which contributed to the accumulation of their developmental shortcoming. Maximum development of a child's cognitive abilities as well as compensating for environmental differences, favours not only intellectual emotional development, since no failure is encountered either in kinder-garten or in the primary school.

It, therefore, seems obvious that in order provide all children with full possibilities of over-all development, the objectives, teaching content, methods, forms and strategies of pre-school education must be changed. calls for experimental work on pre-school education at Various stages of the child's development full and implementation of the most effective measures. In this sense, the study will make significant contribution providing strategies for the optimum learning and development of children.

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This would also help a long way in developing a positive academic self-image. Because, difficult tasks and high expectations due to lack of knowledge on readiness would only develop negative academic self-concept and a general low self-esteem.

Finally, it could create an awareness in authorities of screening children more effectively and meaningfully, taking into consideration all the aspects of the child's development which contribute to the child's readiness.

Since little attention has been paid to the readiness of the child and less so on assessing children appropriately it is hoped that this study would be useful for Teachers and Principals.

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CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction :

Reviewing the available literature in the field of pre-school education one is astounded by the fact that there are hardly any studies conducted in the field. A yawning gap can be seen as far as research in the area of pre-school is concerned. Searching through the Surveys of Educational Research one can see a glaring lacunae in studies on pre-school children or pre-school education. The number of studies undertaken at the pre-school level can be counted on the tips of one's fingers. Compared to the proportion of studies carried out in the primary, High School and Tertiary level, research in the area of pre-school is negligible.

Of the categories formed by Dr. Buch in the Survey of Educational Research there are none in the area of Pre-School education under the categories of Philosophy of Education, Programmed Learning, Correlates of achievement, Economics of Education and Educational technology. Correlates of achievement which is an important aspect of learning and which has been probed into by a number of studies in other stages is totally untouched as far as preschool stage is concerned.

In the "Fourth Survey of Research in Education" edited by M.B. Buch a separate Chapter on Early Childhood Education has been included for the 1st time. This indicates that E.C.E. has come to be recognised as an important field though the trend report laments on the fragmental nature of studies and the lack of extensive and exhaustive tendency of studies.

Ofcourse, one heart warming indication is that there is a gradual increase in the number of studies conducted in the area of pre-school. In the first survey there are only seven studies documented which increases to nine in the second survey, whereas in the third survey there are as many as twenty-five studies conducted in the area. This trend is truly indicative of the gradual growing interest in the pre-school stage and in the fourth survey the trend seems to be maintained.

Since there were only a handful of studies enlisted at the doctorate level, the researcher scanned through studies conducted at the post-graduate level and came across a few at S.N.D.T. Department of Human Development, M.S. University Baroda (Department of Child Development) and Tata Institute of Social Sciences.

hands on only one study at the doctoral level and a few at the Post-graduate level. Most of the studies were on the general development of pre-school children like motor-development, mental development or language development.

Next in line came surveys of pre-primary schools and prevailing conditions of services for pre-school children.

The scene is very different when one comes to the studies done abroad. Research in the field of "Early Childhood Education" is so extensive and exhaustive that every area has been thoroughly studied in a methodical manner. Studies are on topics as varied as compensatory education, Readiness of pre-school children, Reading Readiness, School Readiness, Theories expounded by various experts, Methodological Surveys, Effectiveness of different curricular programmes and so on.

Of the studies that are available in the field of pre-school education they have been discussed separately in foreign and in the Indian context since they are neither comparable on quantity nor on quality.

- (a) Researches conducted in India.
- (b) Researches conducted abroad.

Research in Indias

The areas under which the available researches in India have

been categorised are:

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- 1. Developmental aspects of pre-school children.
- 2. Family and Cultural influences.
- 3. Assessment and Guidance &
- 4. Existing programme for pre-school children.

In India, of the studies conducted majority of the studies (nearly 40% of them) were studies related to developmental aspects of pre-school children. This is obvious since at this stage developmental traits play a very important role in the child's growth, learning and his ultimate ability to progress. Every aspect of the pre-school development is researched upon - motor, cognitive, psychosocial, language and conclusions have been drawn.

Studies on family and cultural influences have been conducted mainly on disadvantaged and underprivileged children.

Different available 'services and programmes for the pre-school children is another area frequented by researchers, mainly to find out the existing conditions and available opportunities to pre-school children. There have been shockingly very few studies on 'Teaching & Teacher Behaviour & Teacher Education'. These too are mainly at the post-graduate level. Assessment and guidance is one area

where in India, hardly a handful of studies are conducted whereas, abroad a sizeable number of researches are enlisted.

At the Post-graduate level in S.N.D.T. Home Science and Child Development Department and at the M.S.U., Child Development Department, a number of studies revolving around 'Pre-school children'are conducted. Though the studies undertaken at the Post-Graduate level in M.S.U., Baroda are in the field of pre-school education, the studies at SNDT are on 'Nutrition of Pre-schoolers and Family influences'.

DEVELOPMENTAL ASPECTS OF PRE-SCHOOL CHILDREN

Arunjata: V and Srinivasachari G, studied the "Functional Vocabulary of pre-school children", 1968. The purpose was to study the Functional Vocabulary of children in the age group 4 to 7, so as to develop quickly the abilities of children, to read and write.

"Production of Mediation Deficiency in children's free recall" was investigated by Saraswati T.S., 1975. The result revealed deficit in the young children's item recall and category organisation involving both production and mediation deficiency.

The language development of Nursery and primary school children was researched by Chattopadhay, S.K., 1971. The findings were that language skill was directly related to age and hence to maturation. Children of educated parents were better than the children of less educated ones.

Badami C.H. investigated on some aspects of moter development among pre-school children, 1974 and identified motor skills as an important tool for diagnosis and school placement which could be used for effective organisation in selecting various activities for children.

Devi, C.L. has researched on "An Analytical Study of Social Development of Nursery School children" 1975 and concluded that favourable attitude to school was seen among the high socio-economic group.

Mathur P. studied the, "Personality Development of Pre-school children of working Mothers" 1971 and concluded that SES rendered the differences in home environment of the child on very many counts.

Patel, 8.8. 1982 investigated on the role of general abilities of pre-primary school children in relation to reading readiness and found that the general ability was found to influence the achievement of the child of K.G.I and

K.G. II in all the components of reading readiness as well as in the overall scores of reading readiness.

A study of intellectual abilities and psychosocial motor behaviour among pre-school children was probed by Shahin A. 1971. It was revealed that Intelligence, motor, language and personal social behaviour developed in an inter-related manner. In depth study revealed interaction of Organism with Environment.

Intelligence was found to be highly co-related and deprivation having detrimental effect on space perception when intelligence was controlled in a study by Shukla P 1973.

A comparative study of Marathi Balbharati (Std I) Vocabulary and the vocabulary of pre-school children was made by Atre V.V., 1976 who concluded that there was no difference between the vocabulary of the children who had attended pre-school classes and that of children who had not.

Phukan D., investigated the effect of "Parental Bilingualism on the Acquisition of Language Skill of preschool children", 1979. The study revealed that Bilingualism did not seem to be a serious handicap in linguistic development.

NCERT initiated a series of developmental studies in the late sixties and early seventies for studying the developmental characteristics of Indian pre-school children who were in the age group of 2-1/2 to 5.

Muralidharan (1970, 1971) has reported studies on the adaptive, personal-social and motor development of Indian children. The target groups were urban, rural and industrial children and great differences were found between these three groups. The study suggested that in order to reduce the gap between the three groups of children, it is important that compensatory pre-school programmes be made available to the rural children where they may use indigenous material.

Bevli 1974 has conducted studies on the language development of Indian children in the 2-1/2 to 5 years age group. The educational implication of the findings are evident. The lower development of rural children is primarily due to the lack of stimulating environment. To accelerate language development in pre-school years, more stimulating reading material needs to be provided to the children of rural areas.

"A few studies on the Developmental Aspects of Pre-school children were conducted at the Post-graduate

level, Department of Child Development M.S.U. Baroda as

Shah L. conducted "A study of language development of pre-school children" 1970 and concluded that there was no significant age/sex difference in the language of the children.

"A study of Language performance of pre-school children with special reference to the socio-economic status" was researched on by Mohite. P. 1973 and found that children of higher socio-economic group are more advanced in their vocabulary as compared to lower socio-economic group.

In the field of studies on children's Abilities David S. has carried out on "observation and classification of children's Behaviour in the Nursery School and study of five children, Judged secure and five children, Judged Insecure" 1957 and has concluded that the secure children showed consistently more freedom and spontaneity, evidenced more socially integrative behaviour. They withdraw less from situations, were more purposive in their reactions, and used a relatively small amount of domination in confronting others.

"A study of Mental Abilities of a sample of preschool children" was probed by Padma S.K. and Pankajam. B.

1965 and have summarised that as the age increased, the percentage of passes on difficult items also increases. This shows that as age increases the complexity in mental abilities develop.

Shelat. M. and Mishra N. researched on A comparative study of Cognitive Abilities, classroom adjustment and Scholastic achievement of first grade children with or without Pre-school experience 1972 and have concluded that Nursery School attendance appears to help girls in Cognitive abilities and classroom adjustment in first grade, but not in scholastic achievement.

"A comparative study of Cognitive abilities of Pre-school children exposed to 3 different curricula namely: Progressive, Montessori and Formal Teaching was probed into by Popat J. Barkataki M. 1976 whose results revealed that there was a significant difference at 0.5 level on the performance of Cognitive tasks in favour of the Progressive Curricula.

Two studies which have been located at SNDT University at the Post Graduate level are:

- (i) Athalye, M., "Generosity in nursery school boys", 1983.
- (ii) Bhat, M., "Language maturity of pre-school children in relation to their socio-economic status", 1987.

Family and Cultural Influences

Khandekar M. studied "The disadvantaged preschooler in Greater Bombay", 1973 and suggested that regular medical check-up, parent education in child care, immunization, providing nutritional supplements, recreational services and new paediatric centers should be started.

Kapadia. G.G. studied "The E.C.C.E. programmes for the underprivileged children 1968 and reported that a play oriented programme where children were free to play, discover and explore the environment and learn for themselves seemed to have worked well.

Mehta A.D. explored "the sex role identification of pre-school children from three socio-economic classes 1972 and concluded that pre-school boys and girls differed in the sex role preferences regardless of their belonging to a particular socio-economic class.

"Working Mother and Early Childhood Education" was studied by NIPCCD,1978 which came up with the finding that for the child's normal development an institutional set up of high quality for the children, during working hours, is very essential.

Saron V. researched on "A study of Personality traits of Nursery School children against the background of their home environment", 1979 and found that curiosity, creativity, constructiveness and practical competence depend largely upon the presence of proper environment at home.

Misra B.K. 1968 studied "The significance of cultural background in learning process and summarised that cultural background plays a significant role in the determination of learning.

A study of some aspects of physical growth of children from 2 to 6 years of age from urban and rural areas of Gujarat was carried out by Pathak, Y.C. 1975. The study revealed that each aspect increased with the increase in age and there were significant sex and area differences, boys being superior to girls and urban to rural in most aspects of growth. The growth increased with the increase in socioeconomic level.

Several studies were conducted at the post-

Auddy, S. : "Maternal employment the child's perspective", 1986.

Bhave, V. : "The influence of parents, teachers, peers

and school achievements on children's self-concept", 1981.

Bothra, B: "Mothers of pre-schoolers and sex-education, 1983.

Shah, A: Effects of maternal employment on children, 1983.

Mehta, V.H.: Social class and maternal punitiveness in relation to child's aggressive behaviour, 1980.

Moochhala, M: Situational effect on the rétaliatory aggression in children at différent age levels, 1987.

Pakkala R.: A study of working mothers and children, 1984.

All, J.R.: Achievement differences among children of various ordinal birth position, 1985.

MEASUREMENT AND GUIDANCE

In the field of Guidance and Counselling, "Behaviour problems of children — Pre-school and Early School Age" was investigated by Muralidharan. R 1961, who revealed that the total behaviour problems score is generally found to decrease as the chronological age increases. Children of middle-class and of employed mothers have more problems.

"Construction, and standardisation of Performance Test of Intelligence for ages 3 to 13 was researched by Bhatia H.R., Tandon R.K., Somvanshi A.K.S. and Saxena J.K., 1964. The test was validated against parents and teachers estimate of child's ability and scores on the Bhatia's battery of performance test.

Umrajwala U.R. studied "Construction and standardisation of reading readiness test for the children of Central Gujarat", 1977 and found that there was no sex difference with regard to reading readiness of the children. Children having pre-primary school experiences were better prepared for learning and reading than those who had not attended such schools.

Hemalatha, J. studied the "Measurement of Mental abilities of well-nourished and mal-nourished children", 1979 and found that the mental abilities of the well nourished and mal-nourished samples when matched with age, sex, family income and education attainments of parents, the former scored higher.

Pathak, M. studied "Influence of supplied cues in Human figure, Drawing of pre-school children", 1977 and found cues helped to improve the performance of Incomplete Figure (I.F.) test at the later stages. The facilitating

effect of cues started early for ears, arms and legs but only at late stage for eyes, trunk, feet and hair.

Srivastava, A.K. and Simhadri, R.A. constructed a "Test of Reading, Readiness and Mental Ability in First Generation learners". 1979.

The findings of the investigations were found to be related. Intelligence and age was positively related to reading readiness and the girls were better than the boys.

Children exhibited equal ability in taking verbal and non-verbal tests in a study by Krishnamurthy. R "Preparation of Materials to develop Reading readiness in children of pre-school age", 1971.

Desai S.H. prepared "Construction and standardisation of tests of language Development of Gujarati children of the age group 3 to 5", 1974 and summarised that the Language Development was highest in the beginning and slowed down in the next years.

Thakkar A.P. studied the "Curriculum in Pre-School Education", 1979 and evaluated the influence of the factors namely schools or socio-economic group effect and their resulting interactions.

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Studies located at the Post-Graduate level of Department of Child Development MSU Baroda were:

Bhola R., researched on "A Study of Learning experience offered to Mothers of pre-school children", 1979 and has concluded that if the mothers are offered a learning programme, their children tend to perform better and if the same programme is offered at a minimal level in the presence of the child, then results obtained are significant. This finding has its implications in terms of investment of personnel and time while conducting a programme.

In the field of Readiness for First Grade, Jariwala. M. studied "Children's Drawings as an indication of general readiness for first grade". 1963 and has concluded that the scores on both tests, namely, evaluation of drawings and Draw-a-Man test indicated consistently higher trends for the girls than the boys whereas for teachers ratings, they were not consistent.

"A study of Factors Related to Reading Readiness leading to Reading Achievement in the first Grade" 1981, was carried out by Bhavnagiri N, and has revealed that the performance on the Crates Reading Readiness Test was positively related to the performances on the Reading Achievement Test.

Parekh, K. has investigated "A comparative study of the two groups of children to the First Grade — One exposed to the normal kindergarten Programme and another exposed to a special Training Programme" 1970 and has come to the conclusion that on the overall performance of the experimental group made more gains than the control group in various sections of the Arithmetic Reading Test.

Children were prepared better for reading and adjusted to 1st grade, when exposed to special training programme has been indicated by Desai B. 1973, in "A comparative study of the Adjustment of the Two Groups of children to the First Grade — one exposed to the normal kindergarten Programme and another exposed to a special training programme".

Gupta R. has investigated "Development of a comprehensive Readiness programme for First Grade" 1980 and has concluded that the comprehensive readiness programme has been developed such that a teacher in any kind of setting may select activities on the basis of children's level of performances, and on the basis of the resources available.

"Development of a school Readiness Programme for Implementation in standard I of A Municipal Primary School in Baroda", was studied by Guha N. and Shah U., 1979. It is

evident from the major findings of the study that most of the children of the first standard were not ready to begin Formal Reading, Writing Arithmetic, Science, Social Studies at the time of entry. However, improvement were seen when a variety of experiences were provided through the Readiness Programme as the programme was individually paced. Further, it was also evident that such a programme can be incorporated within the normal school programme with relative ease.

Barkataki, B. has investigated on "Impact of Readiness Programme on Teacher and pupils of NPSS School of Baroda", 1981 and his recommendation was Readiness programmes or refresher courses on school readiness should be regularly conducted every year so that the majority of the primary teachers are covered and the influence of the programme is reinforced.

"A six weeks structured academically oriented Pre-school Programme for Non-exposed Children from low Income Group", was investigated by Patel. R. 1976. He has revealed that results on language and scholastic tasks indicated that sample showed marked gain in each item.

Pradhan, S. has probed on 'A study determining the effects of learning experiences offered to the mothers on Learning Abilities of Pre-school Children", 1976, and has revealed that the experimental group showed great improvement

in most of the items of the test than the control group.

experimental pre-school programme based on progressive philosophy of Nursery school on a Non-exposed group of children from low income group" 1976. The results have indicated that the difference between the mean of pre and post test scores were significant at .01 level on the paired 't' test. Various recent studies show positive effect due to exposure to compensatory pre-school programme. Therefore this indicates that the programme has been effective and should be conducted to prepare children in developing the basic skills required for first grade.

Existing Programmes for Pre-school Children

Bapat, B.G. has researched on "An investigation into the conditions of pre-primary education in the Poona University area with a view to finding out problems and suggesting solutions to some of them",

Pisharody. S.B. conducted a "A Critical History and Interpretation of the Educational concepts and Methodology of the Montessori System of Education at the Preschool stage" 1972.

Deka G. has studied "Organisation of pre-primary education in Assam", 1982 and lamented that a definite set of objectives for pre-school education did not exist.

Lina S. has studied the "Development and Evaluation of low cost Indigenous Food Mixes for Pre-Schoolers", 1980 and concluded that the food mixes possessed physiological tolerance and were well accepted by children.

"Country Report on child Development in India. Implication for policy and training" was presented by NIPCCD, 1980 and has surmised that there was a wide variety in the nature of teacher training programmes for pre-school education.

Survey of pre-primary institutions in Bangalore city Institute of social and economic change", was investigated by Rama Kumar V., 1979 in which he came up with the following findings. Most of the schools emphasised learning by mechanical skill and rote memory rather than logical and scientific learning methods. Strangely enough, they prescribed text books to children and taught English and Kannada alphabets in addition to number concepts and nature study, including science concepts.

Rao A and Choudary G. studied "The Balwadı programme in Pondicherry" 1979 and summarized that Balwadi programme fostered children's development..

Rao S.R. researched on "A study of the effects of pre-school education on Primary and Secondary school education" 1980 and concluded that the achievement of the children with pre-school education was higher than that of the children without such education in Class I. But this critical superiority seemed to get nullified in subsequent years and when children reached a higher standard (Class VIII) their performance did not differ significantly from that of the children who received no pre-school education.

"Management of Nursery" was probed by Somiah.

M., 1980. It was found that the Corporation schools were better equipped in terms of black boards and aids for the development of knowledge.

Yeli R.S. has investigated on "A critical study of pre-primary education in Karnataka" 1979, and has found out that the nursery type of schools dominated the entire fabric of pre-primary schools in Karnataka.

Some studies were carried out at the Post-Graduate level in MSU Baroda.

In the field of Teaching and Teacher's Behaviour Sheshadri, S. 1976 has enlisted certain basic characteristics as most essential for being an effective teacher. These were - interest in children, confidence in self, cheerfulness and

sound knowledge and understanding about human growth and development.

Asher, P. has studied an "Inservice Training Programme for the Nagar Prathmik Shikshan Samiti (N.P.S.S.)

Teachers of Baroda" 1979 and has identified the emphasis of the Primary School Teachers on reading and writing skills at pre-school level contributing to pressures on children and their development.

Few studies were conducted at the Post-Graduate Department of Human Development and Department of Post-Graduate studies and Research, in Home Science, S.N.D.T. University. They are:-

- (a) "A study of Pre-School Education in Southern Bombay " by Laxmi S., 1988.
- (b) "A profile of pre-school Education In Northern Bombay" by Menon A. 1988.
- (c) "A study of the establishment and development of 'balmandirs' in Gohlvad" 1965 by Bhatt and Indira.
- (d) "A Study of profile of balwadis in Dharavi slums by Agarwal and Anuradha, 1988.
- (e) "Profile of pre-primary teacher training institutions of Bombay" by Chachoria and Sujata, 1989.

Puri T. 1972 has summarised that it is important to determine the needs of the pre-school institutions for

planning of training programmes for the teachers.

Three studies are reported from Tata Institute of Social Science at Post-graduate level. A study conducted as far back as 1949 by Ms. Susheel B. Pendse was or "Preprimary Education in Bombay city and suburbs". The study apart from finding out behaviour inadequacies in teacher pupil relation, teacher training, indoor and outdoor space provisions, emphatically concluded that pre-primary schools were not adapted to the child's needs.

Another study conducted in 1957 April by Ms. Khim May was, on "Nursery Schools and Day Nurseries in Rangoon". In this study the conclusions drawn were about inadequacies and suggested that the activities, routine etc. be based more on the needs of the child and that there should be teacher-parent association which would facilitate closer understanding between the two about the child.

A study was conducted on Parents' and Teachers' perception of the function of the Pre-primary school" by Radha Kumari, Rupa Surati, Shobha Vakil etc. in 1972, which indicated that the pre-primary schools served the purpose of helping the child adjust to primary school better.

RESEARCH ABROAD

As discussed earlier in the beginning of this chapter the scene is very different when one comes to the studies done abroad. Research in the field of Early Childhood Education is so extensive and exhaustive that every area has been thoroughly studied to a great extent.

The history of research in early childhood dates back to the first decade of the present century which began in 1904 with the work of Alfred Binet, a pioneering psychologist and physician. He thought 'that it might be possible to measure the difference between the behaviour of feeble-minded children and normal children and that such measurements could be used in planning school programmes'.

Compensatory Education, Theories expounded by various experts, Methodological surveys, Effectiveness of different curricular programmes etc. Rane Spitz (1953, 1955) has reported the result of his observation of children in two institutions who were deprived of normal contact with their mothers or with their mother substitutes. Goldfarb (1943) peeped into the speech development of Institutionalised children. Sussan Issacs (1953) provided some suitable play experiences and studied the personal relationships of young children at certain age levels. Inhelder and Piaget (1964)

investigated into the stages of cognitive development of young children in terms of their genesis and structures. Barbel Inhelder (1982) of the University of Geneva has been an active collaborator of Jean Plaget.

are studies which were There started an compensatory Educational programmes, both in the U.K. and For example, the University College, Swansea (U.K.) conducted a project in comparative education which covered Longitudinal developmental studies and prepared suitable materials for language development of deprived children. Perry Pre-school project (1962) was an experiment to assess the longitudinal effects of a 2 years pre-school programme designed to compensate for functional mental retardation. The most well known anti-poverty programme launched in the U.S.A. was the Head Start Project (1969) which was designed to improve the children's health and help in their social emotional development.

In addition to these, there are projects which deal with the Methodological issues of teaching certain curricula. An example in this regard is Weikart's pre-school curriculum project (1968) which aimed at exploring the effect of three curricular styles including : 'Unit approach', 'Cognitive-based approach' and a 'Language training curriculum'. Torrance (1972) concluded a study on question asking skills and providing educational stimulation to young

children.

Having presented an overall review of the researches in Early Childhood abroad, these can be categorised into the following broad heads:

- 1. Developmental Characteristics
- 2. Family and Cultural Influences
- 3. Handicapped pre-schoolers
- 4. Curriculum and Methodology
- 5. History of Pre-school movement
- 6. Readiness
- 7. School Readiness
- 8. Compensatory/Enrichment/Intervention programmes
- 9. Screening devices devised
- 10. Concept theories
- 11. Programmes for Pre-school children
- 12. Teacher education.

Unlike in India where there were limited number of studies and even the areas on which research has been carried out are limited, all the available studies, including those at the Post Graduate level in E.C.E. have been reviewed.

Since, there are several studies conducted in various areas abroad, those research carried out in the following three areas only have been reviewed as they are

very closely associated with the present study. They are:-

- 1. Readiness/School Readiness
- 2. Compensatory and Enrichment Programmes
- 3. Screening devices devised.

READINESS

It is generally assumed that learning occurs best when people are ready to learn and that without being ready, little learning will occur (Sawyer, 1975).

Developmental psychologists have taken one of three perspectives on the question of maturation (Kohlberg and Mayer, 1972). From the nativists perspective development toward maturation is principally biological (genetic). Advocates of this perspective include Neill (1960) and Gesell (1954).

A second perspective — advocated by social learning theorists, behaviour modifiers, reinforcement theorists, and learning theorists — assumes that development toward maturation is largely environmental (Langer, 1969). Depending upon environmental design, one can effect varying outcomes of the developmental process.

Older children are more difficult to work with for they have had more environmental influences 'written

into' their developmental histories. Advocates of this perspective include Hull (1943), Guthris (1952), Skinner (1953) and Bereiter and Englemann (1966).

The third perspective may be viewed as a compromise, for its advocates assume that development is the result of both genetic inheritance and environmental effects. Representatives of this perspective are variously referred to as Cognitive developmentalists, cognitive discovery theorists, interactionalists or structuralists. They include Piaget (1970), Bruner (1960) and Kohlberg (1969). These cognitive developmentalists assume that if the genetic and environmental conditions are appropriate, children will be ready to perform provided the children also perceive the situation appropriately (Werner, 1948).

Nearly all of the research on readiness is based on kindergarten or first-graders, although there have been some exceptions where the intent was to assess the predictive ability of readiness measures (Perry Guidubaldi and Kehle, 1979, Pikulski, 1973). Various populations have been investigated, including groups with upper-middle socio-economic status (SES) (Becher and Wolfgang), 1977) and lower SES (Scott and Kobes, 1975), innercity (Richek, 1977) and rural (Know and Glover, 1978) children, Latinos (Vincent, Bright and Dickason, 1976) and Orientals, Puerto Ricans and Eskimos (Mitchell, 1967).

Various measures of readiness have been employed in an effort to find the most useful instrument. Metropolitan Wolfgang, 1977, Hayes, Mason and covert, 1975, Mitchell, 1967, Pikulski, 1973, Rude 1973; Vincent, Bright and Disckason, 1976), the Gates-Machinite Reading (Brekke, Williams and Harlow, 1973; Glazzard, 1979; and Shapiro, 1976) and the Gesell School Readiness Test (Kangman, 1971) have been employed. In addition, various self-concept measures (Flynn, 1975), plagetian measures (Becher Wolfgang, 1977, Kanjman, 1971) and criterion-referenced measures (Gacka, 1978) have been assessed. Intelligence measures have also been investigated as correlates indicators of readiness (Feshback, Adelman and Fuller, 1974; Huberty and Swan, 1974, Knox and Glover, 1978; Kohlberg and Gershman, 1973, and Telegay, 1976).

Obviously some standardized measures of readiness are better predictors than others (Kapelis, 1975). An expedient and useful measure of readiness is based on teacher's rating (Floak and Velicer, 1977; Glazzard, 1977, 1979). Yet one of the simplest measures of reading readiness is letter recognition. Simply seeing if children can recognise and recite the letters of the alphabet, serves as a reliable indicator of readiness to read.

There is little evidence to show that increased teaching of reading readiness skills ensures success in

learning to read (Rude, 1973). In fact there is no simple way to identify children who are likely to encounter reading difficulty (Pikulski, 1974) although it is likely that family size (Scott and Kobes; 1975), and socio-economic status (Telegay, 1974) affect readiness in predictable fashions; low SES children score less and children from smaller families score better.

Institute for Science and Technology (WIST) Program can produce readiness skills in disadvantaged pre-schoolers (Vincent, Bright and Dickason, 1976). It is also clear that preschool educational experiences can benefit children's readiness to learn (Knox and Glover, 1978). This is especially so if early diagnosis of oral language deficits occurs (New comer and Magee, 1977). Attention to self-concept, delay of gratification and self-control are also recommended (Flynn, 1975). Even so, if a single prescription were offered to increase reading readiness, it would be to encourage children to recognize the letters of the alphabet (Hoskison, 1977, Richek, 1977-78; Telegdy, 1975).

School Readiness grew from the normative studies and publications of the Gesell Institute of Child Development at Yale University in the United States. The American pre-occupation with testing, especially for intelligence, dating back to at least 1917, was fed from 1940 on, by the age-

behavioural norms published by Gesell and his associates. The latter became concerned that developmentally immature children would suffer in school because of their unreadiness to meet the demands of teachers.

Research includes validating tests that purport to identify school readiness, developing programmes to overcome unreadiness and looking at long-term studies of educational effects of school unreadiness special placement, grouping or instruction are the methods being used to overcome or diminish school unreadiness.

At Yale University, the Gesell group attempted to evaluate the whole child, not just intellectual functioning. In fact, a socially immature but very bright child was designated as "Super-immature", one likely to experience difficulty in school (Ilgetal, 1964). Gesell attempted to define this "whole child" concept in terms of "adaptive behaviour", or "those behaviours which reflect the child's capacity to initiate new experiences and to profit by past experience", which included perceptual, orientational, manual, and verbal skills, as well as intellect (Gesell et al, 1940). According to the Gesell group, the child's actual behaviour at any age is the result of interaction of the child's genetic potential with the environment (Gesell et al, 1974).

The battery of developmental tests given by the Gesell group had seven parts, including an interview with parents (Fig. et al.1964).

Since the Gesell test battery, or any other, frequently yields on uneven profile of performance, sophisticated decisions, have to be made, by a trained teacher or guidance counsellor, as to school readiness. While tests may precede school entry, or promotion to first grade, by six months or more, late maturational effects may be ignored. The idea of a developmental quotient is evolved, not as a standard, but as a way to compare chronological with maturational age (Ames et al. 1979).

Many readiness tests have been developed, evaluated and used, in different ways. The Metropolitan Readiness Test is probably the most widely used test although it samples a narrow reading and mathematics (Saliva and Yesseldyke, 1978). K.G. Teachers often make readiness decisions, with or without the use of tests, by simple observation and interview techniques.

The major forms of research in this field have chiefly focussed on finding reliable predictors of learning problems, on programme of instruction which may overcome various forms of child unreadiness, and on long term studies of relationships of child characteristics, School

achievement, and various forms of intervention.

In attempting to find reliable predictors a long list of characteristics and conditions has been studied, including oral language proficiency, attainment of concrete operations (in the Piagetan sense), maternal intelligence, books in the home, cultural background, dentition, native language, birthweight, socio-economic status (SES), mental age, social maturity, ethnicity, drawing skills (for example in completing a drawing of a man), listening comprehension skills, and educational criteria, as well as the attitudes of school staff.

COMPENSATORY AND ENRICHMENT STUDIES .

There have been several notable attempts to stimulate readiness (Bronfen Brenner, 1974; Wargo et al, 1972, Legler 1970). Some of the most significant attempts were incorporated in Project Head Start and in Follow through (Maccoby and Lellner, 1970). The people connected with the children Television Workshop (Lesser, 1974) have also sought to assist children to become ready for school through watching "Sesame street" or for doing well in reading by watching "The Electric Company". Title I federally appropriated funds were used to help poor children of school age. A thorough review of the title I on compensatory education programmes (white, 1973) concluded that some

programmes are effective while others are not. The results of carefully planned programmes such as "Sesame Street" also indicate that children can be prepared for school and assisted to do better if attention is given to making them ready. (Lesser, 1974).

Turiel (1966) suggested that children are best assisted towards development when instruction is slightly ahead of the child's current level.

Bloom (1976) assumes that children can learn anything if they are allowed to proceed at their own pace with carefully designed instruction.

In addition, the educator is advised to avoid classifying children under any label (Habbs, 1975, a 1975b) Development of profiles identifying the child's specific strengths and limitations are preferred.

The results of controlled, short-term experiments on problem-solving have reported both successes and failures, (Braimerd 1978). Frequent repetition of reasoning strategies leads to retention with children who are most ready to develop.

The major focus of early childhood programmes for more than two decades now has been compensatory education

(Hellmuth 1970). Data indicated that low-SEL children whether from the slums or big cities (Deutsh 1963, 1964), the slums of the small rural towns of the South (Gray 1962), the Appalachian Mountains (Sherman and Key 1932), or the south eastern region of the United States (Kennedy, Van de Riet and white 1963) - performed below their middle - SEL counterparts on both intelligence and readiness measures as they entered Further, as they progressed through school school. cummulative deficit in academic achievement scores apparent (Deutsh 1964, Jensen 1966). 3his Cumulative deficit hypothesis was a basic part of the rationale for early compensatory education (Evans 1975). Gray (1962) suggested that low-income children might receive less, a more restricted range, or a different order of stimulation when compared with more affluent children.

Common practice in the nursery schools and kindergartens of the 1950s had been to focus on socialisation and mental health aspects of child development with a secondary emphasis on intellectual or academic domains (Sears and Dowley 1963).

The shift in early childhood education from a emphasis on socialisation and acculturation to a newer emphasis on the educability of intelligence, the malleability of the young, and cognitive development was reflected in the writings of Hunt (1961), Bloom (1964), and Mecandless (1952)

and in the experimental work of a number of social scientists beginning in the 1950's and early 1960's. These studies includes those of Kirk (1958), who studied the early education of mentally retarded children. Deutsch (1963), (1964), whose initial enrichment programme in early childhood with nursery, kindergarten, and primary age children was carried out in several schools in the Harlem district of New York City, Weikart (Weikart, Bond and Meneil, 1978, Weikart et al 1970), who worked with 3 year old children at home and at school in the Ypsilanti (Michigan) Perry pre-school project, Gray and Klaus, 1966, 1970; Klaus and Gray 1968; Gray et al 1965) who worked with groups of 3 and 4 year old children in Hurphreesboro.

A number of other studies that can be classified as experimental preschool compensatory programme began at about the same time (Early 1960s) or shortly thereafter. These early studies and reviews of them include Bereiter and Engelmann) (1966); Bissell (1973); Blatt and Garfunkel (1969), Bronfenbrenner (1974); Di Lorenzo, Salter and Brady (1969); Fourace, Connore and Goldberg (1962); Gordon (1967) Gordon and Guinagh (1974); Heber and Gardner (1975); Hardvitz and Paden (1973); Krnes et al (1969); Painter (1969); Palmer and Siegal (1977); Ryan (1974); Schaeter and Aarouton (1977) Skeel (1966); Springle Van de Riet and Van de Riet (1968); Stearm (1971); and White et al (1973). the sheer quantity and vigour of the research and discussion cited above were

the beginning of a revolution in early childhood education (Hadger and Smith 1978, 1980) and quite rapidly yielded. Head Start and its family of programmes addressed to the needs of low-income children. These studies also laid the foundation for the development of a variety of instructional models that based on a range of different sets of quiding Mere principles, were focussed on a number of different goals, and used alternative ways to teach children (Bisell 1973; Branche Overly 1971) (Gordon 1972, Weikart 1972). programmes service their guiding principles interactionists Cognitive theory of Piaget for example, Weikart's cognitively Oriented Curriculum (Weikart et Others are behavioural principles from 1971). conditioning for instance, the Academic Preschool of Benetter and Engelmann (1968). A third group maintains an allegiance to the normative maturational principles that predominant in the traditional nursery and pre-school, as the Developmental Interaction programme of Bank Street College of Education (Biber, Shapiro and Wicken 1971). of these three specific examples of instructional models the preschool classroom or centre as a major means of working with children, but the Cognitively Oriented Curriculum alone adds home instruction. A fourth type of model based on communication and social learning theories, uses television an alternative system for reaching children "Sesame Street", the pre-school programme developed through the Childrens Television Workshop (Lesser, 1974). There frequent examples of attempts to help parents become more

adept at their roles as educators. A middle - SEL orientation in parent education was typical of the majority of efforts upto the 1950s and 1960s, when experimental early childhood education programmes began to focus on the less well to do parent (Chilman, 1973).

The pre-school compensatory programs included a parent-involvement component a parent-education component or both.

SCREENING DEVICES DEVISED

Innumerable measurements/assessment devices can be located in literature from abroad to screen readiness of pre-school children. Most of them are those which can be administered by teachers in school but a few have been devised to be administered by parents at home. Some of them can be administered in groups though most are to be administered individually. They are:-

- 1. The ABC inventory to determine K.G. and school Readiness, entrants to K.G. and Grade I 1965 constructed by Normand Adair and George Blesch.
- The Apell test Assessment Program of Early learning levels, constructed by Eleanor V. Cochran and James L. Shannon, Edcodyne Corporation for ages 4, 5 - 7 (1969).

- 3. The Anton Brenner Developmental Gesalt Test of School Readiness devised by Anton Brenner, Western Psychological services for ages 5-6, 1964.
- 4. The Basic Concept Inventory Field Research Edition constructed by Siegfried E. Englemann, Fallet Educational corporation consists of Pre-school and KGN, 1967.
- 5. Harriet Seay Binion and Raland L. Beck devised a test
 called Binion-Beck Reading Readiness Test for
 Kindergarten and first grade published by Acorn
 Publishing Co.
- 6. Another test was devised by Mary Rodrigues, William H. Vagler and James F. Wilson and (Houghton Miffin Co.) on analysis of readiness skill, Reading and Mathematics for grade Kon- 1, 1972 (1969-72).
- 7. Theodore Clymer and Thomas (Barrett, constructed a test called Clymer Barrett pre-reading Battery for first grade entrants which consisted of visual discrimination, auditory discrimination and visual-motor
- 8. The contemporary School readiness test constructed by Clara Elbert Sauer and published by Montana Reading Clinic publications is an unlimited test intended to be administered at the end of kindergarten or the beginning of first grade.
- 9. Group Test of Reading Readiness the Dominion Test for

- grades Kgn, Kgn-1 by the Department of Educational Research Ontario College of Education, University of To ronto, distributed by Guidance centre.
- 10. M. Lucile Harrison and James B. Strond constructed the Harrison Strond Reading Readiness Profiles for grades Kgn-1, using symbols, making visual discriminations (2 parts) using the context, making auditory discrimination, using context and auditory clues, giving the names of letters.
- 11. Delco Readiness Test first grade entrants 1970 scores, visual motor, visual discrimination, total Walter M. Rhoades, Delco Readiness Test.
- 12. Crates Mac Grinite Reading Tests: Readiness skills, Grades Kgn-1: 1939-69.
- 13. The Gesell Developmental tests, Ages 5 -10, 1964-65; readiness to start school; individual, constructed by Frames R. Ilg and Rouise Bates Anes.
- 14. An Inventory of Primary skills, Grades Kgn I; 1970; IPS.
- 15. Kindergarten Behavioural Index : A screening Technique for Reading Readiness Grade Kgn I, 1972. KBI.
- 16. Kindergarten Evaluation of Learning Potential Kgn; 1963- 69, KELP.
- 17. LRS. Seriation Test ages 4 6. 1968.

- 18. Lippincalt Reading Readiness Test (including Readiness Checklist) Grades Kgn I; 1965.
- 19. Mc.Hugh McParland Reading Readiness Test Grades Kgn I, 1966.
- 20. Metropolitan Readiness Tests. Grades Kgn I; 1933 69

 MRT constructed by Gertrude H. Hildreth, Nellie &

 Griffith and Marry E.Mc Gauvram Harcourt Brace

 Jovanorich Inc.
- 21. Maturity Level for School Entrance and Reading Readiness Grades Kgn J 1950-59.
- 22. Parent Readiness Evaluation of Pre-schools Test. Age 3
 4 to 5 8. 1968 69.
- 23. Pre-Reading Assessment Kit. Grades Kgn I 1971 72
 PRAK.
- 24. Preschool and kindergarten Performance Profile.
 Preschool and Kgn 1970. PKPP
- 25. Primary Academic Sentiment Scale, Ages 4 4 to 7 3
- 26. Reley Preschool Developmental Screening Inventory Ages 3- 5, 1969.
- 27. The School Readiness Checklist Ages 5 6, 1963 68.
- 28. School Readiness Survey Ages 4 6 1967-66.

- 29. The Steinbach Test of Reading Readiness. Grades Kgn I. 1965-66.
- 30. Screening Test of Academic Readiness Ages 4 0 to 6 5, 1966.
- 31. Sprigle School Readiness Screening Test Ages 4 6 to 6 9, 1965.
- 32. Watson Reading Readiness Test Grades Kon I 1960.

summarised that there is an urgent need for more emphasis on research in the field of Preschool Education. Studies in Indian context are already rare and it would be more appropriate to have our methods on the findings with reference to Indian requirement. Teacher education another neglected area needs to be researched so that readiness of preschool children can be strengthened. Finally since India comprises of a major chunk of it's population belonging to the disadvantaged and underprivileged sections of society, research in this area concerning preschool education needs special attention.

CHAPTER III

THE RESEARCH DESIGN

Introduction

Readiness is necessary for any task to be undertaken. The child who is scholastically ready is able to take up tasks expected of him by the school more easily and efficiently than the one who is not. Knowledge about the child's readiness would enable educators to provide an active and meaningful environment. Hence, the study aims at probing into the area of school Readiness, investigating into the factors that contribute to 'Scholastic Readiness' (S.R.) and enlist the characteristics that are associated with 'Scholastic Readiness'.

The present study seeks to describe the 'Scholastic Readiness' of Pre-School children, examine its influence on the 'Academic Achievement' (A.A.) and the 'Personal Abilities' of the child and delve into the factors in the home affecting it.

The study could be broadly categorised into two stages. The first stage which deals with the Readiness aspect of Pre-school children and its influence on their 'Academic Achievement' and 'Personal Abilities'. As the S.R.

of P.S.C. was probed into it was found that the 'Home' exercised a very strong influence on the S.R. of the child. So, it was decided to scrutinise the 'Home Environment and Background' and study it's effect on the child's S.R. Hence, the second stage deals with 'Scholastic Readiness' as a factor and the influence of Home Environment (H.E.) of the child on it. Hence, in this study, S.R. is both a dependent and an independent variable. In the first stage, S.R. is the independent variable and the A.A. the dependent variable. The attempt here is to find out what influence does S.R. exercise on A.A.

In the second stage, S.R. is a dependent variable and H.E. is the independent variable. Here it is attempted to find out how far S.R. is dependent on the H.E., or in other words how does H.E. influence the S.R. of the child. Thus, the variables of the study are as follows:-

- 1. Scholastic Readiness (S.R.)
- 2. Academic Achievement (A.A.)
- Personal Abilities (P.A.)
- 4. Home Environment (H.E.)

The aspects included in this study under each variable are given below:

- (1) Aspects of Scholastic Readiness
 - (a) Motor Skills

- (b) Cognitive Skills
- (c) Psychosocial Skills
- (d) Comprehension of English Language
- (11) Aspects included in Academic Achievement:
 - (a) Language
 - (b) Number Work
 - (c) General Knowledge
- (iii) Aspects covered in Personal Abilities are:
 - (a) Other Activities
 - (b) Self Attributes
 - (i) Personal Data
 - (11) Mental Abilities
 - (iii) Social Skills
 - (iv) Personality Traits
- (iv) Aspects of the Home Environment are:
 - (a) Home Background
 - (i) Education of Parents
 - (ii) Education of Mother
 - (iii) Education of Father
 - (1v) Occupation of Mother
 - (v) Occupation of Father
 - (vi) Socio-economic status
 - (vii) Number of Siblings
 - (viii) Remidential Area

- (b) Parental Involvement
 - (i) Attitude to Child Rearing
 - (i1) Actual Handling
 - (iii) Parental Expectations
 - (iv) Personal relations
 - (v) Facilities provided
 - (vi) Preparation of the child
- (c) Parental Interest.

Methodology:

The purpose of the study is to investigate into the Scholastic Readiness of Pre-school children, the associated aspects in the child and at home and its influence on Academic Achievement. The study is mainly an exploratory one. A tool to describe and measure scholastic Readiness and a tool to describe and measure Home Background were devised by the researcher.

The method used is the descriptive method of the correlative and the comparative types. It attempts to describe the components of Scholastic Readiness of the Preschool children, the characteristics of Scholastic Readiness of Pre-school children and the aspects involved. It also attempts to study the influence of Scholastic Readiness on the Academic Achievement and the Personal Abilities of the

child. Lastly, it attempts to describe the environmental conditions at home delving deep into the home factors that influence the child's Scholastic Readiness.

It attempts to compare children with different levels of S.R. on A.A. and find out the correlation between S.R. and A.A. Comparison of children with different levels of P.I. and H.B. on S.R. is also attempted.

The study went through the following stages:-

To begin with to enlist the factors associated with scholastic Readiness, a preliminary study was conducted on the children studying in the Pre-school section of S.I.E.S. High School. The characteristics and aspects associated with the high scorers and the low scorers were enlisted.

After this, the literature on 'Readiness' was scanned and the developmental norms laid down by experts were checked. Encyclopedia of education and Encyclopedia of educational research, International Encyclopedia of education were also studied.

The norms laid down for devising a tool, the precautions to be taken while constructing a tool for the very young ones and the aspects to be considered while

constructing an interview schedule were studied.

A tool was constructed to measure the Scholastic Readiness of the child. This was the "Scholastic Readiness Screening Device".

To study the factors that promote and influence Scholastic Readiness, an interview schedule was constructed to interview parents and enlist factors that are associated with Scholastic Readiness.

Thus, the study attempted to describe in detail the concept of 'Scholastic Readiness' of pre-school children, the influence of 'Home Environment' on 'Scholastic Readiness' of Pre-School children and the influence of Scholastic Readiness' on the 'Academic Achievement' of children.

Attempt is made to compare children at different levels of 'Scholastic Readiness' and their 'Academic Achievement' scores. The effort here is to find out whether Scholastic Readiness exercises any influence on the Academic Achievement of the child, whether there are any differences in the Academic Achievement of children with different levels of Scholastic Readiness. There is an effort made to correlate the Scholastic Readiness scores and their Academic Achievement scores to find out whether there is any correlation existing between Scholastic Readiness of children

and their Academic performance. This would indicate whether S.R. has any influence on A.A. of children.

Attempt is made to compare the S.R. of children with different levels of Home Environment to find out, whether, there is any significant difference in the S.R. of children coming from different types of Home environment i.e. whether 'Home Environment' influences the 'Scholastic Readiness' of children.

Scholastic Readiness is correlated with Academic Achievement at different stages — at the two Unit Tests, at the 1st Semester exam and the 2nd semester exam to find out whether Scholastic Readiness has any relation with Academic Achievement.

Besides studying the direct relationship between Scholastic Readiness and Academic Achievement, and Scholastic Readiness and Home Background, different groups were formed on the basis of high, moderate and low scorers on Scholastic Readiness and these groups were compared on Physical - Motor skills, Mental traits, Psychosocial traits and personality characteristics on the basis of the ratings given by the teacher in the class.

An effort has been made to group the children into different categories on the basis of Parental Interest and Parental Involvement and the differences that exist in

them as far as Scholastic Readiness and Academic Achievement are concerned, were studied.

For the purpose of testing the hypotheses and description of the data, the scores of Motor, Cognitive, Psychosocial and Comprehension of English language, were examined and compared, both separately and as a whole, since, it would then give an exhaustive picture of the whole concept of 'Scholastic Readiness'.

<u>Sample:</u> The study aimed at investigating into the Scholastic Readiness of pre-school children. The population of the study was the pre-school age children.

Sampling Method: Incidental sampling method was used i.e. the children who were studying in S.I.E.S. — those who sought admission and were admitted, formed the sample for the various aspects of the study. They consisted of both boys and girls between the ages of 3 to 4 years. The sample is basically urban in nature. They belonged to middle S.E.S. and lower S.E.S. families.

Nature & Size of the Sample:

Preliminary Study: Children studying in the year 1985-86 batch numbering 484 comprised the sample for the preliminary study to investigate into the characteristics associated with scholastic achievement and enlist them.

<u>Pre-Test:</u> 15 children were selected at random from those who sought admission in 1986-87, to conduct a pre-test to determine the administration procedure of the screening Device.

<u>Pre-Pilot</u> 50 children were selected again at random from those who sought admission in 1986-87. The screening device was administered to determine the discrimination index and for item analysis.

Pilot-Study: 344 children who sought admission in 1986-87 for Jr. K.G. Class comprised the sample for administering the final form of Scholastic Readiness Screening Device to establish the reliability.

Final Sample: Children admitted in S.I.E.S. in 1987-88 numbering 337 of which 308 continued in the school, comprised the sample for describing the S.R. of pre-school children, studying the influence of the home background on it and examining its relationship with A.A. and for determining the validity of the tool i.e. the predictive validity of the Scholastic Readiness Screening Device.

Parents of these 308 children were called for interviewing them to ascertain the Home Environmental factors contributing to scholastic Readiness. Table 3.1 shows the Nature and size of the sample.

TABLE 3.1

NATURE AND SIZE OF THE SAMPLE AT VARIOUS STAGES OF THE STUDY.

: Nature of : Work/Stage :	: ; Year :		: Girls :	: Total Sample:
: Preliminary : Study	: 1985-86	•		
: Study	Jr.K.G.	: 139	124	263
: :	: Sr.K.G.	114	107	221
t	:	1		484 :
: Pre-test	:1986 Jan	: 8	: 7	: 15 :
: Pre-Pilot	:1986 Jan	27	ŧ 23	: 50 t
: Pilot Study	:1986 Feb	1	£	
: Screening		244	179	423
: Selected	1	213	158	371
.:Took Admission	1	201	138	344 :
: Screening	: 1987	1 279	178	: 457 :
: Selected	:	230	1 139	369
:Took Admission	:	213	: 124	337
Interview tof parents	: 1987	177	1 101	278
!	F	inal Sampl	e	
Sample for sprediction	t 1987	i i	:	t t
:Took Admission	:	: 213	1 124	: 337 :
:With us	: : 	199	109	30B

Tools Used: To collect the required data necessary to investigate into the Scholastic Readiness and the influence of the Home Environment, appropriate tools were required. The researcher looked around and found that there were a few tools devised at Post-Graduate level or at the individual/institutional level but the validity and the reliability were not established. The tools devised abroad did not cater to Indian conditions, since they were devised for a different population; they would, ultimately, be biased and it would be futile maining use of them. Hence, the researcher decided to evolve a screening Device herself.

The data required for the study were in the following areas:

- (a) Scholastic Readiness of the Pre-school children
- (b) Academic Achievement of the Pre-school children.
- (c) Personal Abilities of Pre-school children.
- (d) Home Environment of the Pre-School children

Hence tools were required to measure their

- (1) Scholastic Readiness of the children
- (2) Academic Achievement
- (3) Personal Abilities
- (4) Home Environmental Factors

Some kind of a tool was necessary which would help one to enlist the characteristics of a ready child and

help to screen children at the time of entrance to school and measure the readiness aspect.

A tool was also necessary to measure the 'Home Environmental' factors that influence the S.R. of a child.

To measure Academic Achievement of the children, marks were taken from the School Report Card .

The data for testing the hypotheses were collected with the help of the following tools for measuring all the above mentioned aspects in the study. These can be grouped into those that were adopted from the school records and those that were devised by the researcher. Given below are the details of tools used in the present study:

Tools devised by the researcher :

- (A) Scholastic Readiness Screening Device.
- (B) Interview Schedule (For Parents).

Data from School Records:

- (A) Check List
- (B) Rating Scale
- (C) Personal Data Sheet
- (D) Progress Report Card.

Devising A Tool To Measure Scholastic Readiness:

To assess Scholastic Readiness of the pre-school children, a screening devise was required to measure it. As mentioned earlier, a suitable device was not available, and hence a device had to be developed separately.

This device had to be based on factors and aspects responsible for readiness for learning. Learning does not take place only through the intellect as is thought commonly - there is a multiplicity of factors that operate in the learning process.

Intellect is a facilitating agent in learning but emotions are recognised as the motivating force in all learning. Therefore, when one takes up the responsibility of assessing readiness, one will have to consider, not only the intelligence of the child and his cognitive skills but also his emotions and other related aspects. It is the total child that readies for learning and the schools that are to play an important role in the education of a child have to develop the strategy of understanding the child as a whole.

Importance of Measuring the Right Things

The foremost task while going about devising a tool was to identify the specific aspects that would aid in

measuring the Scholastic Readiness. The effectiveness for description of any object or person depends upon two things — how wisely the features to be described are chosen and how truly and accurately they describe each one. A description may fail to be useful, for, the need at hand if irrelevant features are chosen to describe.

The first and, perhaps, the most important step in our measurement task was defining what is that is to be measured; otherwise, the objectives are likely to be incompletely formulated and expressed in vague terms. The concepts had to be clarified and made more specific before progressing towards sensible procedures of measurement. Until it was decided what is meant by readiness or what behaviours are exhibited by a person who shows Scholastic Readiness, there was little prospect of developing procedures to apprise either the one or the other.

Hence, to begin with, it was decided to conduct a preliminary study at the pre-school section of the S.I.E.S. School to probe into the characteristics of children at different levels of performance.

Preliminary Study:

An indepth study was conducted on 484 children

studying in the 1985-86 batch to ascertain the specific features and characteristics associated with school performance. The check list administered by the teachers to note the various characteristics and traits of individual children in the pre-school section was used for the Preliminary study to enlist the specific features associated with the child's performance in school.

Check List

The check list had the following 4 areas :-

- (I) Individual Traits
- (II) Academic Performance
- (III) Other Activities
 - (IV) Comprehension of English language

Each	area had the following sub-areas:	
ı.	Individual Traits:	Personal Data
	Three major categories	Personality Traits
	for individual traits	Mental Abilities
II.	Academic Performance	Language
	Three major categories	Number Work
	for academic performance	General Knowledge
111	Other Activities	Drawing
	Five major categories	Painting
	for other activities	•
		Claywork
		Puzzle
		Paper folding &
		sticking
1V H	incwledge of English language:	uan dan anga kan kan gang gang tipo dan sahi atan atan gan tan atah tani apid wan pati pang atah teru apad
	One category for knowledge	
	of English language;	
	Inderstands English and speaks flue	n+1v.
	Inderstands English, but does not s	-
	oes not understand English and doe	
	without and political horizonth A delic marilial following	en tree en personantir

Following are the aspects included in each of the sub-area, viz.,personal data:

In Personal Data	:In Personality Traits	 Abilation
وه ۱۱۶۵ کافت بویت بسی سری کاف کلیگ پیشار پایت واقع نمای کیا کاف آبای کابی کاف با کاف کاف کاف کاف کاف کاف کاف ک	t	1
Physical Development	:Leadership Qualities	:Attention Span
Height	:Mixes freely	:Observation
Weight	Speaks Freely	: :Curiosity
General Health	:Co-operation	:Memory
Cleanliness	:Cheerful	: :Receptivity
Discipline	t Moody	:Retention
	;Poised	s sRecall
	: :Restless	
		•
	:Confident	•
	ŧ	1
	:Hesitant	:
	t	t
	:Self Reliant	1
	1	t
	:Dependent	1
	1	t
	:Generous	:
	1	t
	:Self-Centered	2

In Language	:In Number work	:In General Knowledge		
Recognition	*Counting	iInformation on various		
Reading	: :Recognition	: :matters like months o		
Writing	: :Writing	: :the year, days of the		
Conversation	t tSpelling	: :week, names of fruits,		
Singing & Recitation	ī. I	: :vegetables, animals,		
Singing with action	1	: :flowers, birds and		
•	t t	: : «hapes»		

	رين وي جي هن جي هن بين لين اليو جي هن شاه باد باد باد الله اليو هن الله الله الله الله الله الله الله ا
In Other Activities	:In Knowledge of English Language
	•
Drawing	iUnderstands English and speaks fluently.
Painting	:Understands English, but does not speak
Clay work	:fluently.
Puzzle	Does not understand English and does not
Paper folding and	:speak.
sticking	£ :

The teachers checked the individual traits 4 times a year in August, October, January and April and marked them as follows:

- A + if they were very good
- A if they were good
- B if they were satisfactory
- C if they were fair
- D if they were below average

There were 5 divisions of Jr. K.G. and five divisions of Sr. K.G. From each division the top ten rankers and the bottom ten rankers were chosen for the preliminary test. Thus, in all, there were hundred top rankers and hundred bottom rankers in Academic Achievement scores (ranking was mainly on the basis of Academic Performance, i.e. scores obtained in different tests in school).

Children were ranked in language, number work and General Knowledge based on different tests and exams — 2 Unit Tests, ist Semester and 2nd Semester. The marks obtained by each student in—all the tests were totalled up and the children were arranged in the descending order. Thus, from each section of the ten sections in the school (5 in Jr. K.G. and 5 in Sr. K.G.) the top ten scorers and the bottom ten scorers were taken up for the preliminary study. This amounted to 50 high scorers from the Jr. K.G. and 50 high scorers from Sr. K.G. totalling to 100 high scorers and 50 low scorers from Jr. K.G. and 50 low scorers from Sr. K.G. totalling to 100 low scorers.

It was found that the high Academic Achievers consistently scored "A+" or "A" in all the columns, whereas, the low Academic Achievers consistently scored B, C or D. The high scorers did not score a single C or D, whereas, in contrast, the low scorers did not score a single 'A+'.

Investigating into the characteristics of low Academic Achievers and high Academic Achievers, it was found that family size, S.E.S., order of birth, education of parents particularly of the mother and profession of parents were all positively related to the performance of the child. Higher the presence of the above mentioned factors superior is the performance of the children and lower the above mentioned factors inferior is the performance.

The high-achievers had specific traits. peneral health condition was better, they followed cleanliness and routine diligently, and were far disciplined. They displayed leadership qualities, mixed spoke unhesitatingly, were very co-operative. freely. cheerful, poised and their social adaptations were high. for the personality traits, they were more confident and self-reliant. In the case of mental abilities, their attention span was longer, they were more curious, keen observers, had good memory, high retention and recall and very receptive to everything. They performed very well language, in recognition, reading, writing, singing with action, etc. As far as Number Work, their counting, recognition with spelling, general knowledge they were very good since they scored "A" grades in them.

In other activities too like drawing, painting, claywork, paper folding and sticking they excelled.

In contrast, the low scorers were found to be lagging behind in all these aspects. Their general health condition was inferior, cleanliness was not followed, they were highly indisciplined, lacked leadership qualities, were not social, non-co-operative, did not mix freely and had communication problems. Some of them were very moody, anxious, hesitant, not at all confident, not self-reliant and were found to be very dependent. As for their mental abilities, their attention span was very short, they lacked

in memory, receptivity, retention and recall, had difficulty in reading, writing, arithmetic work and were poor in recognition and discussion. The preliminary study confirmed that it was not mere cognitive abilities, but developmental aspects in totality that contributed to the child's performance. Children scoring high, academically were definitely superior in all their developmental aspects, physical, mental social and personality.

Procedure of Devising a Inol:

The literature regarding Scholastic Readiness were scanned to investigate into the concept. Encyclopaedia of Educational Research, Encyclopaedia of Education, the developmental norms and tasks laid down by Child Development experts and other related material were studied and the components, characteristics, aspects and factors influencing Scholastic Readiness were compiled.

A survey was conducted by visiting nursery schools all over Bombay (Appendix 1) to ascertain the method for screening, interviewing, and admissions. This gave an idea of the magnitude of problems revolving around the admission procedure and the assessment of the readiness of the child.

All the schools said that they did not have any kind of methodical system to screen children. They had devised their own method through experience. Almost all the schools followed the system of asking questions like "What is your name", etc...then asking them to name objects, pictures, etc. Some of them allowed the children to enter with parents while some schools expected them to come alone. Here the researcher observed that children were often torn away from parents, screaming and wailing. All this produced a lot of anxiety and tension in the minds of the tiny-tots. The entire atmosphere during screening in all the schools observed, was charged with tension.

During discussions, the schools that were visited agreed that the system that they followed was not satisfactory — that they were not successful in the task of screening. All of them expressed the need for a more suitable and appropriate screening device.

The fourth step in the procedure of devising an appropriate tool for screening the Scholastic Readiness of pre-school children was scanning literature regarding preparation of screening devices. All the norms and regulations laid down by different experts in the procedure of preparing screening devices were thoroughly studied. Different types of screening devices that are available were also scanned. The norms set especially for devices in the

educational field and specifically for pre-school children were probed into. 1 This enabled the researcher in enlisting the essential components necessary in formulating an appropriate device to assess Scholastic Readiness.

The task of preparing the screening device was taken up with the necessary points in mind. The foremost problem in the development of the screening device was the selection of items which could possibly assess the necessary traits of readiness.

RATIONALE FOR SELECTION OF ITEMS

As discussed earlier, there was hardly any tool available in India to screen Pre-school children for scholastic Readiness. Tools constructed abroad by different authors lay different emphasis and are for a different population as its subjects. So to suit the local conditions and the definitions formulated for the study the present tool was constructed.

The few existing instruments devised are heavily loaded with verbal ability and hence, they may not do full

Linchestein, R., Ireton, H.: <u>Pre-school Screening</u>.
Florida. Grune and Shatton 1984

justice to those individuals who are low in verbal ability, since children, at this stage, have not developed their verbal ability fully. The main concern was to develop a device which can be administered to the pre-schooler easily without any elaborate procedures and which may later be also used by pre-school teachers for continuous evaluation of children. Though no tool was adopted directly, the literature; on the following tools was found to be very valuable in providing the rationals and the outline for the development of the present text of Scholastic Readiness.

- A. Minneapolis Pre-school Screening Instrument (MPSI)

 (Lichenstein, 1980 b).
- B. Minnesota Pre-school Inventory (MPI) (Ireton and Thwing, 1979).
- C. Development Indicators for the Assessment of Learning (DIAL) (Mardell and Goldenberg, 1975).

The following papers presented in the 22nd Annual Conference of the Indian Association of Preschool Children Nov. 1986 were also helpful

A. Towards developing an assessment checklist for preschool years. Sharma A., Roy G., Mistry V., M.S.

¹ Linchestein R., Ireton, H. : Op. Cit.

University, Baroda 1984.

- B. Developmental Assessment : A tool for the teacher.

 Sharms N., Sharms B., Anandalaxmi B., Lady Irwin

 College, New Delhi, 1984.
- C. Teachers Rating Scale: An Assessment tool. Mohite P., Shastri J., M.S. University Baroda, 1983.
- Developmental Assessment of Pre-school Children. Parekh K., Shukla S., M.S. University Baroda.

The tool items were selected on the basis of developmental norms laid down by experts and taking into consideration—the different aspects influencing Scholastic Readiness in totality.

The guideline was that areas that are most relevant to a child's success or failure in school, be given importance as laid down in the Encyclopaedia of Education. Then, a review of tools and kits already devised for assessment of nursery children was made. This was followed by systematic observation of children in the pre-school section of the school.

The foremost point in mind while collecting tool items was selecting items which are appropriate to be used in

the class-room situation, with the pre-schoolers who are just entering school and without any sophisticated equipment. A number of items which may suit the situation were listed to make a choice of tools out of a large number, to ensure their usability in the local conditions. These again were discussed with the guide, with the personnel working in the field and observation of the pre-school children at S.I.E.S. school in the different classes. The items thus collected are listed in Appendix 2.

The collection of tool items thus went through the following stages:

- (1) Pre(Initial)study
- (2) Discussion with the personnel working in Pre-schools.
- (3) Observations in the Pre-school sections
- (4) Literature on Pre-School children and Readiness
- (5) Norms laid by experts of tools constructed.
- (6) Literature on different available tools and measurement instruments.

The scanning of literature confirmed the fact concluded in the preliminary study that all the developmental aspects influenced children's performance. Hence, every area of development was included while compiling the screening device to measure Scholastic Readiness.

A holistic approach in screening was essential. It was necessary to include the whole child for screening. The whole child includes the physical self, the emotional/psychological self, the social self and the mental/cognitive self.

Thus the screening device included all the development areas of the child. Ofcourse, it is not possible to separate the developmental abilities into distinct and non-overlapping categories. They are all interrelated, one influencing the other and only for technical purposes are they discussed under separate heads.

The areas included in the acreening device are i

- 1. Physical/Motor Skills
- 2. Mental/Cognitive Skills
- 3. Psychosocial Skills &
- 4. Language Skills

The physical/motor development has been included because it is basic to emotional, intellectual and social development of the child. When the young child's abilities and capacities have not developed to the extent required or essential, then the consequent stresses and strains of the learning environment interfere with the child's learning and development.

mental/cognitive function was included The because it goes without saying that this is a basic requisite for any learning. It is important to understand the biological pace of a child's natural intellectual growth development. Language development and communication skills basic to full intellectual development have also Language is difficult to be distinguished considered. from the cognitive area since major part of cognitive functioning involves processing of verbal material and relies upon comprehension of language. Language functioning can be divided into two general components, receptive language which involves decoding and comprehension of verbal material expressive language, the formulation and expression of thoughts in verbal forms. The decoding aspect of receptive language may be regarded as encompassing, perceptual processes such as auditory reception and discrimination which are prerequisites for higher order processing of verbal information. Expressive language pertains to aspects of verbal output, such as, syntax, grammar and word use. As the young child's expressive language capabilities lag far behind what he or she is able to comprehend, his receptive language was mainly taken into consideration.

Speech too was included which indicates how capable he/she is in formation of sounds. Speech involves the child's proficiency at producing desired speech patterns so as to be comprehensible to others.

The emotional/psychological aspects have been included because if the child is not emotionally ready, the stresses and strains of the educational system shatters the emotional stability. Negative attitudes of lack of self-confidence, inferiority complexes and lack of initiative take deep root through their school work. The emotional unreadiness can most certainly interfere with the intellectual performance of the children.

The social adaptation has been taken into consideration since it also influences the child's learning processes. If he/she is unable to interact with the peer group, adjust and accommodate to the requirements of the social group, he/she may perhaps have difficulty in learning through group processes.

Following are the criteria on the basis of which the items in the preliminary draft were included before the eventual selection:

- (a) Items which take care of the developmental aspects of children at this stage.
- (b) Items which will be interesting enough and get maximum involvement from the children.
- (c) Items with which children are familiar.
- (d) Items which will be relevant and enable the children to attempt easily.

- (e) Items which would be understood easily.
- (f) Items which will demand minimum of verbal response.

Nature of Items!

The items were both of performance type as well as verbal type. There was a good balance between these two. The items chosen and compiled were such that children of age should be able to tackle them easily according to norms The screening was conducted in a gradual manner and laid. did not take place all of a sudden, which may be very traumatic for the child. The items were within the understanding capacity of the children in this age The items had enough scope for varied, extensive and possible valid responses which the children could provide with their limited experiences. Since the device included observation of children by letting them play and engage in activities in groups, it gave a complete picture of the child as a whole.

Validity

Validity concerns the crucial question "How well does a measure do, what it is intended to do?" In the case of the screening device in question the objective is to identify those individuals who are scholastically ready or unready.

Content validity pertains to evidence that a test or

instruments contains the right stuff. That is, the instruments content should be consistent with the domain of skills, abilities or behaviours that the instruments purports to measure. The content validity was established both by building the device systematically on the prescribed norms of developmental scales laid down by experts in the field of child development and by getting the approval of 10 educationists.

The preliminary draft was given to 10 experts working in the field of Education, Guidance and counselling. (Appendix 3). The purpose of devising a tool was explained and the aims of the study listed. They were requested to go through the items in the preliminary draft carefully and score each one of them between 1 to 5 on the basis of appropriateness and suitability.

After collecting it from all the experts, the items were coded and those that were approved by atleast 7 of them were enlisted. Thus a draft form (Appendix 4) of Scholastic Readiness Screening Device was compiled and prepared.

Pre-Test:

The items were tried out on a very small sample of about 15 children just to get a feel of how long it takes

to administer the screening device on children, what are the hindrances and how children respond to these items. Discussions were held with teachers and others in the field of pre-school, to find out whether the items were appropriate. After the collection of items, the time taken by each child was noted down, which facilitated fixing-up of appropriate time limit in the final draft. At random, 15 children - 7 girls and 8 boys - were selected to go through the screening device. The administrative procedure was decided - the ways in which the children would be screened which is discussed in following paragraphs.

After this, following items were eliminated, as administration was very difficult. The coldur matching and shape matching, found very interesting by children were deleted, since children took long to complete them. It was realised that these items which seemed to be very lengthy requiring longer duration for attempting, made children lose interest. There was also a tendency to avoid complicated and difficult ones. The visual discrimination item was dropped on this account since children found it too complicated and difficult to be attempted.

Then, the compounded items were enlisted. A draft form of scholastic readiness screening device was prepared, consisting of 10 items for children and 8 items for observing children.

PRE-PILOT STUDY

The pre-pilot study was planned and conducted firstly, for item analysis and secondly, to determine the method of scoring. The pre-pilot study was conducted on a sample of 50 children, selected at random from those who sought admission in 1986-87, and the facility value and Discrimination Index was worked out.

One of the most important step in the development of the psychological tools, is item analysis — Garret(1973),1 claims that employing item analysis infact improves the validity and reliability of tests. Guilford (1954)2 asserts them in order to obtain an objective information concerning the test items, including item analysis, as unquestionable. Item analysis primarily concerns itself with item difficulty and item discrimination. Item difficulty is taken in terms of the proportion of individuals completing the items successfully and discrimination index refers to the degree to which it differentiates between those obtaining high and low scores.

Garrett, N.E. :- Statistics in Psychology and Education. New York. David Makay Co. 1973.

² Guilford, J.P.: Psychometric Method. (2nd Ed.). New York. McGraw Hill. 1954.

children who function within age expectations and the few who are notably below. Following items which had the discrimination index below 0.20 were modified and eliminated.

The observation of "Fine and Gross Moto: Skills" were eliminated since it did not discriminate between high and low scorers. Most of the children seem to be having a reasonably developed Motor skills, expected of a 3 year old. Again in "Ability to Try Out/Persistence", "Emotional Stability and Maturity" month of them scored low since they were anxious and tensed.

Scoring: Equal Weightage was given to all the three areas

Physical/Motor skills
Cognitive skills
Psycho & social skills

Each of the abovementioned area carried 30 marks and 10 marks were allotted to the child's Comprehension of English Language (since it was felt that he would be attending the English Medium school). Thus the screening device on the whole carried 100 marks.

The details of the scoring was as mentioned below. To begin with children in groups of ten were brought

in. It was a large room where, on one side was spread a long mat on which were spread manipulative equipments, viz., building blocks, peg boards, puzzle trays, strings and beads. There were three sets in each, so that children have enough material and also enough choice. The children were directed to choose anything to play. As they engaged themselves with the equipment each one was scored on the basis of his ability to manipulate the material. The beads, and pegboards had 5 scores each and the blocks and puzzles which is at a higher level and needs more skill for manipulation had 10 scores allotted. As a child manipulated, the following elements were observed:—

- (i) His eye-hand control
- (ii) Motor control
- (iii) Ability to perform that task (i.e. to string the bead, to fit the peg in the hole of the peg board)
 - (iv) Ability to complete that task
 - (v) Swiftness

They carried one score each in the case of beading and pegboards and 2 each in blocks and puzzles. As a child completed a task as, for example, stringing the bead, another equipment was presented to him, say blocks, and was asked whether he would like to play with it and, thus, each child was drawn to all the four equipments to manipulate.

There were 10 beads to be strung, 6 coloured pegs to be fitted in the pegboards, 12 blocks with which he could construct anything and large puzzle trays with 4 pictures each. The puzzle was not a cut-out puzzle (i.e. the same picture cut-out into three or four pieces to be assembled together) since the child at this age would not be able to assemble it, but one full picture cut-out as, for example, the fruit puzzle tray. The cut-outs in complete pictures of apple, mango, pineapple and banana were there. Similarly, there were two puzzle trays of vehicles, a bus, a car, a plane and a ship which are familiar to the children.

given full marks i.e. 5 for the heading, 5 for peg boards, 10 for the blocks and 10 for the puzzle. There were no restrictions as to how he should do - whether he arranges the blocks sideways and calls it a train or builds a tower by keeping them one over the other, the child was given constant signals of approval by nodding the head or smiling. There was no time limit too i.e. no child was pressurised to do or complete it within a given time, but if it was found that the child was not making any progress in it, he was skillfully drawn to the next one by asking him - "Would you like to play with this now?".

As he was engaged in the activities with manipulative equipments, observations were made on his

psychosocial traits. These were classified under 5 categories with 3 sub categories and they were all arranged hierarchically in the descending order and the scores too were arranged from 6 to 1 thus

	E1160 0 Y C	Stability	Ability to establish relationships	Behaviour At Activ- ities
1. Friendly & co-op- erative	Willing to leave parents	Happy &	ifreely	Enthusias- tic & Eager
	l Persuaded by Parents	Occasiona 11y anxious	Interacted loccasionally	lActively linvolved
	 Persuaded by Parents and Teachers	Often An-	lindependent land aloof	Did when Itald I

The first was scored 6 - 5, the second was scored 4 - 3, the third was scored 2 - 1.

As the activities were completed and the observation noted on the physical/Motor Skills and psychosocial skills the acreening came to the 3rd area i.e. the cognitive whills. This comprised of 5 items, thus:

- 1. Picture Recognition

 Naming 4 pictures two scores each 8
- 2. Namino of Articles

 Name 2 articles two scores each 4

3. Repeat After Me

Repeat 2 sentences two scores each

4. Following Instructions

Follow 2 instructions Four scores each

В

5. Speech Clarity

three point scale 6 · 1

To begin with, the child was drawn to picture books and was asked to name 4 different pictures. naming carried 1 scores and the child was then asked to name the articles. Naming of different articles too carried 1 scoreseach. After this, statements were made like "I like to play". "I want a ball" and the child was asked to repeat the This was the item "Repeat After Me". Each sentence repeated accurately had 1 scores. If repeated half (missing one word etc.) he got 1 score and if repeated just the last word 1/2 score. The next item in the cognitive skill area was following instruction. Instructions were given one after another and the child was expected to follow it for e.g. a pen, pencil, book, etc. were kept on the table close near to the child and the child was asked to "Give me the pencil" and so on. How clear was the child's speech was noted on a three point scale.

The scores on Comprehension of English Language were follows:

The child was asked questions in English and he 10 - 9 answered in English

The child was asked questions in English and he 8 - 7 answered in monosyllables

The child was asked questions in English and he 6 - 5 answered in Hindi

The child was asked questions in Hindi and he 4 - 3 answered in Hindi

The child was asked questions in Hindi and he 2 - 1 could not respond well

PILOT STUDY The screening device in the final form (Appendix 5) after the content validity and item analysis, was administered on 425 children who sought admission to the school in 1986-87. Of these 344 children took admission and the reliability was computed.

RELIABILITY

A screening measurement must yield consistent results. If contradictory results are obtained for a child when the same test is administered on different occasions, the information is meaningless as a basis for making decisions. Ofcourse, measurement of a child's developmental functioning will not be consistent as the measurement of height and weight, still a good screening procedure is one that is reliable enough to consistently yield results with a relatively narrow range.

The utility of any psychological test is determined by its validity and reliability. Guilford (1981) and Garrett (1973) emphasize the need to use valid and reliable tools for measuring any criteria.

Since no parallel form of the tool was available, the method of establishing reliability by the parallel form method could not be sought for. The split half method also could not be employed for the simple reason that all the items could not be divided into equal halves. Interitem consistency was also not feasible.

So the test reliability was considered to be the most suited and was used. This involves a comparison between results obtained on different occasions (i.e. at the 1st instance and reperted after some gap) by administering the same test.

The screening device was administered in Feb 1986 to the sample of 344 children who were admitted for the following academic year and the responses were scored. In June '86, when they joined school, the second administration was done after an interval of 15 weeks. This long interval could not be helped since the children were not available. The retest was conducted exactly in a similar fashion by getting 10 children at a time to engage in activities and observing and screening them on various aspects.

development is determined by their learning at home. This is not to overlook the importance of heredity, particularly in relation to physical growth and also intellectual development, nor to deny the influence of wider environment of neighbourhood and the community. For the young child, however, the home and the family play the major part in drawing out, structuring his abilities moulding his personality and behaviour giving directions to his interest and shaping his attitudes.

Hence, it was important to embark upon interviewing parents one is would give a complete picture of the child - how ready are was scholastically, what were the impediments in his home, what abotacles would come in the way of his progress and so on.

The resear her did not come across any suitable questionnaire or schedule and so a new framework of items was prepared from their point of view.

Pre-Study: A pre-study was conducted by interviewing parents of the 308 children admitted in the pre-school section of the school. It was by way of discussion on the following aspects and was semi-structured interview to probe into the Home Background:

(a) How do you spend Sundays and holidays?

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Pre-Study: A pre-study was conducted by interviewing parents of the 300 children admitted in the pre-school section of the school. It was by way of discussion on the following aspects and was semi-structured interview to probe into the Home Background:

(a) How do you spend Sundays and holidays?

- (b) Who takes care of the child at home?
- (c) Are you a member of any club?
- (d) What papers and magazines do you read?
- (e) What is your opinion about toys?
- (4) What is your opinion about books?
- (a) What is your opinion about play?
- (h) Who would help the child?
- (1) What is the role of the school?
- (i) Should toys be been her?

It was decided to probe into the details of Home Background further since there seemed to be a strong relation between Home Background and Scholastic Readiness of children. The various areas in the Home Background were enlisted.

Selection of Areas

phenomenon that it was a difficult task to select items which would comprise Home Background in totality and yet be precise and specific. It is generally reported that Home Background affects an individual sidevelopment, adjustment, personality and is also important in determining scholastic Readiness. The main purpose of interview schedule was to identify factors that were specific in contributing to the child's readiness, to determine the role it played and to compare the home background of high scorers and low scorers in scholastic

readiness screening device.

At first, a draft was prepared with 10 areas, each of which consisted of 10 questions. These areas were chosen on the basis of norms listed by various experts as important aspects and in consultation with pirsonnel working in the field of early childhood education. Since it was suggested that the prepared schedule would take long time to fill up, it was pruned to a shorter form with all the areas in mind. This would also avoid the boredom and monotony which may set in when questioned for too long.

This schedule thus pruned was administered to 12 mothers and items which were difficult to be understood or too open ended, were modified. The final schedule (Appendix 6) had 6 categories, 5 of which had 10 items each and the sixth had 5 items. The categories are as unders

- 1. Attitude to child rearing
- 2. Actual handling
- InterPersonal relations
- 4. Parental expectations
- 5. Facilities provided and
- 4. Preparation of the child

Rationale for Selection of Areas:

Attitude to child rearing was included, since the views and beliefs of parents determine to a large extent, the progress of the child. Scholastic Readiness of children depends not only on their abilities, but also on the attitudes within the family and the school. Lack of favourable attitudes lead to negative feelings which, in turn, affect the Scholastic Readiness.

Some researchers emphasize the view that factors like educational environment at home and attitudes of parents are more consistent predictors of achievement. But all these factors are mutually overlapping and inter-dependent. According to Parker (1967) educational disadvantage is not simply dependent upon social status, but represents the whole syndrome of family characteristics of which most important are Parents' attitude. While concluding the Plowdeu report, Wiseman (1967) stated, "of home environmental variables, those denoting family attitude to education, ambition and literacy are a great deal more important than those denoting material circumstances and social class".

Actual handling was included since it would indicate the exact way in which the child is brought up and obviously it may differ from the attitudes. Opportunities provided to the child to be self-reliant, encouragement given

to be on his own and be independent, are important aspects in child-rearing.

Interpersonal relations go hand-in-glove in understanding the child. The importance of close parent child relationship and interactions cannot be underestimated. It has been proved beyond doubt that interpersonal relations within the family contributed substantially to the child's adjustments and his personality formation. Erikson has emphasized the early parent-child experiences as the determining factor in the child's later adjustment. Mussen Conger and Kagan (1969) have described how unfavourable parent-child relation can cripple the child's chances to adjust successfully to the school situation.

Parental expectations determine to a great extent what the child will achieve, to what extent he will develop, what heights he will attain. Parental aspirations and expectations of their children have been found to be strongly related to the achievement and attainment. High expectations provided impetus towards higher attainment.

Facilities provided have always been thought to be closely associated with the child's accomplishment,

¹ Kuppuswamy, B. : Child Behaviour and Development. New Delhi. Vikas Publishing House, 1980.Pp.260-263

particularly in the scholastic field. The physical features like availability of books, furniture, place and similar other things are part of socio-economic status. These are considered as facilitators to development and progress and it was important to include this aspect to find out, how closely it related to high and low scorers in Scholastic Readiness device.

Preparation of the child, the last variable, included in Interview Schedule, was also thought to be one which indicates whether the Scholastic Readiness of the child was nurtured or left to develop on its own. It was imperative to establish the fact whether any kind of support or help rendered to the child facilitates his readiness.

SCORING: A three point scale has been provided for scoring Agree, Somewhat Agree, Do not Agree were the three alternative answers. The highest a parent could score in an item was 3 and the lowest was 1. The statements were jumbled up so that in scores if one Agrees he scores 3 and in some others if he Does not agree she scores 3. In each of the variable, a parent choid score maximum of 30 and minimum of 10 scores. On the whole the entire interview schedule carried 180 scores. Manual scoring was done of all the variables with the help of one assistant. After completing the scoring, the score tables and data-sheet were prepared.

Rating Scale: Grading personal characteristics. The rating scale is a format prepared in the school which has different aspects to be noted by the teachers under four major areas as follows:

- 1. Personal Data
- 2. Mental Abilities
- 3. Social Skills
- 4. Personality Traits

The various aspects under each of these areas are as follows:

And shall street style. Shall death stage And a shall shall stage the			
Personal Data	Mental Abilities	Social Skills	Personality Traits
Physical De- velopment	Observation	Leadership qualities	Cheerful
Height cms.	Currosity	Mixes freely	Poised
Weight Kg	Memory	Speaks freely	Confident
General Health	Receptivity	Co-operative	Self-Reliant
Cleanliness	Retention	Non-Co-operativ	e Generous
Discipline	Recall		Self-centered

The teachers fill them four times a year in August, October, January and March while entering the marks obtained by children in the different tests. The rating scale (Appendix 7) was however, filled up on the basis of the observation made by the teachers during the classroom

interaction. S.I.E. ... builts an institution which follows the progressive method i.e. the play way method and most of the activities are conducted with a variety of equipments. Hence there is ample scope for teachers to observe the children during free play sessions, during outdoor activities, at the pumple gym, at the slide, with the tricycles and the scopters and so on.

there are special equipments of balance board, etc., where the teacher can observe and strengthen the child's gross motor skills and fine motor skills. There are also activities conducted in drawing, painting, craft work, clay work which include a lot of interaction among teachers and children.

Hence. All these activities provide ample opportunities to teachers for observing children in the specific areas and nating them down precisely.

These were collected for the study which may help in comparing children on the basis of scores obtained by them in the scholastic Readiness screening device and the scores obtained in the rating scale. The rating was done by grading the children thus:

A+ - Excellent

A - V.Good

B+ - Good

B - Satistal tory

C - Fair

D - Beiow Average

Admission Form. The Form of application for admission to Kinder Garten used by the school authority for admission (Appendix 8) was taken up by the researcher as one tool for data collection. It contained all the basic details of a child and his background. It was worded in English and was to be filled up in English only. The bottom strip was left for official use to note down the official details. The form had headings with several sub-headings under many. The information thus filled up by the parents prior to admission is maintained in basic files by the school authorities.

Progress Report Cardi-

Data was also collected from the progress report card (Appendix 9). A report of the progress made by the child in the academic field were maintained by the teachers in the school. The children were evaluated under three main categories:

- 1. Language
- 2. Number Work
- 3. General Knowledge

August, a first semester exam in the month of October a second Unit Test in January and the second semester in the month of March. Each of these category were further subdivided and the child was evaluated. This report card was used by the researcher to correlate the scores obtained by the children in the Scholastic Readiness screening Device with those of the scores obtained in Academic performance. This was done four times in September after the unit test, in November after the first semester examination, and in February and April after the second Unit Test and Semester examination. Correlation was also obtained of the scores on the whole in academic performance.

DATA COLLECTION

Administration Of Screening Device:

During visits to school, the researcher had observed that when children are taken individually to a room, it causes a lot of anxiety and it is a traumatic experience for children when they are separated from their parents. Children were not relaxed and comfortable, but were crying, unwilling or quiet and non-co-operative. Hence, the foremost point in mind while planning the administration procedure was that children would be brought in groups and not individually which would minimise their anxiety considerably. It was also

planned that they would not be brought straight away for screening but for activities with equipments which would give them the feeling of play rather than any formal activity.

Needless to say, in any activity for young children, considerable care must be taken to make the children comfortable secure and encourage them to produce maximum performance.

administration procedure to ensure that it is absolutely conducive for the young children who are averse to strangers, who will be unro operative and who will not be willing to leave the parents. Every effort was made to establish a working rapport and avoid arousing any anxiety in the children. Screening was done only when the child was in good physical and emotional condition. Care was also taken to carry out screening in a secluded, quiet place, free from disturbances and distractions. The screening device was as also taken to simple as possible, which could be used by teachers later as a regular screening-evaluation programme.

Few materials were needed - some equipment, toys, picture books and screening sheets. The screening programme was not timed since children were expected to perform at their level but on an average most children took

about 15 - 20 minutes. It was observed that on an average in an hour four to five children could be screened comfortably on all the items.

Verbal type of responses required 4 to 5 minutes. The children could be kept busy easily with performance items. Simultaneously, observations of Psycho/Social characteristics and motor exills were rated down.

The administration of the screening device was so planned and organised that all these aspects were taken care of diligently.

To begin with, children were brought in groups of ten. Those who were unwilling to leave the parents were allowed to enter with the parents, who sat in a corner. (There were columns to score all these aspects). The arrangement was made in a big room where on one side was a large mat spread with lots of manipulative equipments viz., building blocks, peg boards, puzzle trays and strings and beads. There were three sets in each so that children have enough material and also enough choice. The children were directed to choose any equipment to play. There was no problem to draw the children into these activities since children have always enjoyed building blocks and playing with beads and peg boards. This opened limitless possibilities

psycho/social skills. It called for least anxiety for the child and he felt as though he was merely playing. Also, no one was engaged in it alone. There were 10 children at a time and this, in fact, encouraged him to engage himself in the activity, comfortably. And, on the other side, arrangements were made to interview and screen the children.

As the children were busy with the equipments and observations were made, equipments were given for specific activities. As a child completed a task (i.e. stringing the beads, for example) other equipment was presented to him, say, blocks and was asked whether he would like to play with it, and thus each child was drawn to all the four equipments to manipulate. During activities no comments were made about the product that he was making. He was never given a feeling of making a mistake or giving wrong responses. No judgement was passed.

Three personnel were needed at a time, one to engage children in activities, one to observe and one to interview the child. The teachers who were taken up for this purpose were trained and highly qualified and experienced. They were briefed and a systematic orientation programme was held. Since the teachers were trained it was easy for them to establish rapport with children and parents, and handle

of play and observation permitted a rapport to be established and reduced considerably the anxiety in the tiny tots.

Administration of Interview Schedule The data were collected by the researcher personally by interviewing the parents. Parents were given appointments between 10.00 am and 5.00 pm. spread over a period of 3 weeks. There were three assistants to help, to check whether the parent has come at the stipulated date and time (since many walked in according to their convenience). Fallying of the parents with their child's admission forms was essential to match each child's scores on scholastic Readiness with scores obtained by parents in the interview. These assistants who helped in the interview were personnels involved in the pre-school field and hence were familiar with organising and conducting parent-contacts and 50 on. They were however, briefed thoroughly with the procedure involved and the norms to be adhered to. Creation of good rapport, listening patiently and noting continuously all the relevant information WES emphasized. There was one assistant writing down all discussion, holding the pad on her lap beside the table that the parent did not feel conscious of speaking frankly.

Physical environment was carefully planned and arranged ... comfortable chairs and tables, well lit, ventilated, breezy and airly room with complete privacy and

devoid of distraction were the highlights of the physical Water facilities were arranged and care was environment. also taken to make arrangements for young toddlers who accompanied their mothers. Picture books were kept beside the mother on low tables and chairs so that the toddlers let the mothers discuss freely and frankly. The timing was so planned that the pre-schooler was in the school and the parents attended the interviews in the adjacent wing. Each interview took about 30 minutes excepting a few which beyond 40 minutes. These were of the parents who discussed some issues on their own and needed a patient hearing. A few started suggesting reforms and improvements for the school in particular and some went about discussing problems of children in general.

Before the interview, the objectives/purpose were explained to the parent in simple language. Assurance was given that all the information would be kept confidential. The respondent was convinced that his/her sincere response would be an important contribution. They were also told that all other parents were co-operating in the research, and the respondent was not the only one revealing the facts about family. They were also assured that this would, in no way, affect the child's promotions, handled by the teacher.

Interview first began with general discussion

for a minute or two to establish rapport. Questions like how did they dome to consider what arrangements were made at home, were put forth. Him made the mothers especially, absolutely comfortable and put them at ease. The fathers also discussed about taking leave or making alternate arrangement at the work place. Apart from putting them at ease, this also strengthened their conviction of the researcher being concerned about their problems genuinely.

Since the parents belonged to different socioeconomic background and different levels of education, the
interview had to be conducted in many instances in Hindi,
Marathi and Tamil. A handful of mothers could not manage
even with Hindi, since they had recently migrated from
Gujarat and Karnataka and hence needed the interview in
Gujarathi or Kannada. The assistants could converse in these
languages and hence, there was no difficulty in interviewing
them.

RATING SCALE (For Data Collection)

The rating scale was used to collect detailed information on children. The rating scale is a format prepared in the school which has different aspects under four major areas as follows:

- 1. Personal Data
- Mental Abilities

- 3. Social Skills
- 4. Personality Traits

The various aspects under each of these areas are as follows:-

Personal Data	Abilities	Social Skills (Traits
	Observation		
lopment		Qualities	
Height cms.	Curiosity	Mixes freely	Moody
Weight Kg.	Memary	Speaks freely	Paised
General Health	Receptivity	Co-operative	Restless
Cleanliness	Retention	Non Co-operative	• Confident
Discipline	Hecall		Hesitant
			Self-reliant
			Dependent
			Generous
			Self-centers

The teachers were supposed to fill them four times a year in August, October, January and March, while entering the marks obtained by children in the different tests. The rating scale was however, filled-up on the basis of the observations made by the teachers during the classroom interaction. Since the school follows the progressive method i.e. the play way method and most of the activities are conducted with variety of equipments, there was no dearth of

sessions, during outdoor activities at the jungle gym, at the slide, with the tricycles and the scooters and so on. There are special equipments of balance boards etc., where the teacher can observe, strengthen the child's gross motor skills and fine motor skills. Also, there are other activities conducted — Drawing, Painting, craft work, claywork which include a lot of interaction between teachers and children.

All these activities provided ample opportunities to teachers for observing children in the specific areas and rating them precisely.

These were collected for the study which may help in comparing children on the basis of scores obtained by them in the Scholastic Readiness screening device and the scores obtained in the rating scale. The rating was done by grading the children thus:

A+ ~ Excellent

A - Very Good

B+ - Good

B - Satisfactory

C - Fair

D - Below Average

These were turned into scores from 5 to 0 since it would be possible to quantify it.

Personal Data and Social Skilis had four aspects each to be observed and hence had 20 scores each at a time. Mental Abilities and Personality traits had six aspects to be observed and hence had 30 scores each at a time. Since all these were scored 4 times by the teachers the researcher could gather in all 80 scores each for Personal Data and Social Skills and 120 scores each for Mental Abilities and Personality traits.

Admission Forms

Admission forms were used to collect data regarding the background details. The admission form (Appendix 8) included all the relevant information necessary, and has 17 columns. Of these, the following 7 columns were considered up since it was thought they would be important factors which could influence the child's readiness. They are:

- 1. Educational Qualification of Father
- 2. Educational Qualification of Mother
- 3. Occupation of Father
- 4. Occupation of Mother
- 5. Family Income
- 4. Number of Siblings
- 7. Residential Area

The following particulars were not taken up mince they were thought to be not relevant:

- 1. Name of the pupil in full
- 2. Father's Name
- 3. Place of Birth
- 4. Health and vaccination
- 5. Native Place
- 6. Siblings Schooling

The following particulars were not taken up since it may be difficult to draw conclusion or comparison or correlation. They were:

- 1. Religion
- 2. Mother Tongue
- 3. Place of Birth

The necessary information was first taken up on a separate format matching them with Scholastic Readiness of children. This was then coded which gave a picture at a glance. On the basis of the scores obtained in Scholastic Readiness (Screening Device), children were divided into three groups: The High Scorers, Moderate Scorers and Low Scorers and comparisons and correlations were worked out. The educational qualifications of the mother and father were scored under 5 categories - schooling, S.S.C., Undergraduate, Graduate and Post-graduate or Professional Qualifications.

The family income was categorised under four headings upto 1000, 1001 to 2000, 2001 to 3000, 3000 and above, occupation of father and mother were categorised into various headings.

Progress Report Card:

A report of the progress made by the child in the field were maintained by the teachers in the school. The children were evaluated under three main categories:

- I. Language
- II. Number Work
- III. General knowledge

August, first semester exam in the month of October, second unit test in January and the second semester in the month of March. The marks obtained by the children in each of these tests and as a whole were taken up. The sub-categories i.e. Language, Number work and General Knowledge were also considered both on the whole and at every test. These marks were used by the researcher to correlate with the scores obtained by the children in Scholastic Readiness Screening Device. This was done 4 times in the month of September after the first unit test, in the month of November after the first semester, in the month of January after the second unit test, and in the month of April after the second semester.

Correlation was also obtained of the sources on the whole in academic performance.

Analyses of Data

Depending upon the purpose, different statistical techniques were applied to the data at different stages of investigation. These may be classified into

- a) Those used to obtain general description of data on various variables.
- b) Those which were employed for the testing of the hypotheses.

The particulars of the statistical techniques employed for different purposes are indicated below :-

For description of the data :-

- 1. Measures of Central Tendency Mean, Medium, Mode.
- a. Frequency polygons representing the original & smoothed frequencies.
 - b. Comparison of frequency distribution between different categories.
- 3. S.D., Skewness & Kurtosis of the distributions along with the S.E. of the Mean, SD & fiduciary limits.

- I For testing the hypotheses
 - Product moment correlation technique for those hypotheses indicating relationships.

$$\frac{\text{NEXY} - \text{EXEY}}{\text{CNEX}^2 - (\text{EY})^2}$$

The significance of r is determined in terms of the critical values of r for the degrees of freedom.

 Analysis of variance or ANDVA to test the null hypotheses of differences among more than two categories.

The significance of F is determined by comparison with the critical values for the degrees of freedom in table F.

3. Critical ratio technique or 't'-test to test the differences between two categories.

where SED
2
 / 2 $^{$

The significance of 't' is determined in terms of critical values of t for the respective degrees of freedom from table D.

CHAPTER IV

DESCRIPTIVE ANALYSIS

Data collected through various tools often have little meaning or significance until they have been rearranged or classified in a systematic way.

The data may be adequate, valid and reliable to any extent but does not serve any worthwhile purpose unless carefully edited, systematically classified and tabulated, scientifically analysed, intelligently interpreted and rationally concluded.

According to Wolfe, "The discovery of order in the phenomena of nature, notwithstanding their complexity and apparent confusion is rendered possible by the process of analysis and synthesis which are the foundation of all scientific methods".1

The mass of data collected through the use of various reliable and valid tools was raw. It was systematized and organised, i.e. edited, classified and

^{1.} Sidhu. S.K.: "Methodology of Research in Education", New Delhi, Sterling Publishers Pvt. Ltd., 1985. pp. 274-275

tabulated before it could serve any worthwhile purpose.

The purpose of the present study is to investigate into the S.R. of PSC. The data collected have been analysed and interpreted applying various statistical techniques. In the present chapter descriptive analysis of the data has been dealt with. Measures of central tendency, measures of variability and other parameters, along with frequency polygons, Bar-diagrams and phi-diagrams whenever necessary have been presented of the data collected.

Descriptive analysis is essential, since it helps in establishing the normality of the distribution. An understanding of the characteristics of the frequency distribution; is normal in tendency. Thus in this chapter an attempt is made to establish normality and comparison of various distributions. For the present study data were collected from:

- 1. Children
- 2. Parents
- 3. School Records

The data consists of 4 sets of scores. They are:

1. Scholastic Readiness

distribution represented by the normal curve is necessary since parametric techniques for inferential analysis can only be applied if the distribution is normal.

- 2. Academic Achievement
- 3. Personal Abilities
- 4. Home Environment

Scholastic Readiness consists of:

Motor Skills

Cognitive Skills

Psycho-social skills and

Comprehension of English language

Academic Achievement consists of

Language skills

Number work

General Knowledge

Each of these at the following tests

First Unit Test

First Semester Exam

Second Unit Test

Second Semester Exam

Personal abilities consists of:

- 1. Other activities
 - (a) painting
 - (b) drawing
 - (c) creative work
 - (d) clay
 - (e) puzzles

2. Self attributes which includes:

- (a) Personal data
- (b) Mental abilities
- (c) Social skills
- (d) Personality traits
- (g) Knowledge of English

Home Environment consists of:

1. Home background which includes

- (a) Education of parents
- (b) Education of mother
- (c) Education of father
- (d) Occupation of mother
- (e) Occupation of father
- (f) Economic status
- (g) Number of siblings
- (h) Residential area

2. Parental Involvement which includes:

- (a) Attitude to child rearing
- (b) Actual handling
- (c) Inter-personal relationship
- (d) Expectations of parents
- (e) Facilities provided
- (f) Preparation of the child
- (g) Parental interest

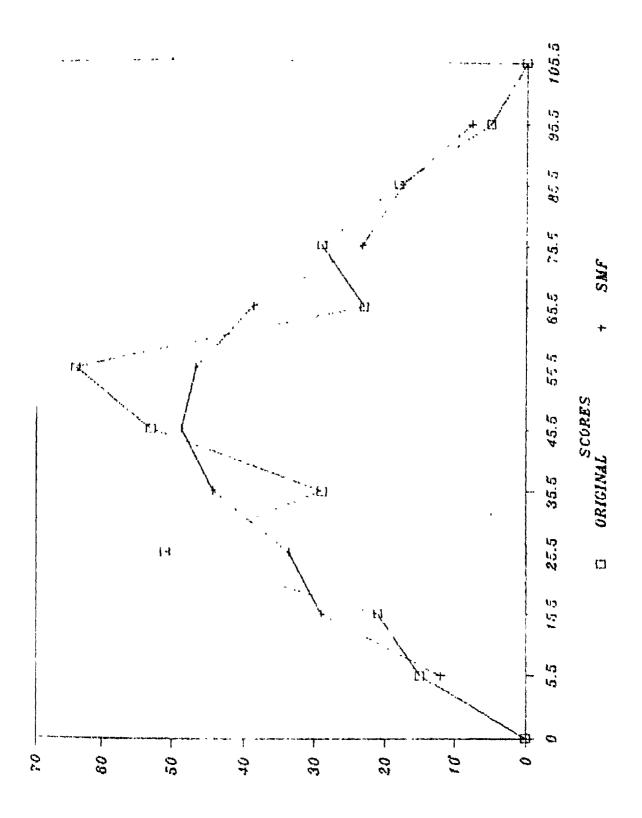
S.R. OF THE TOTAL SAMPLE

TABLE 4.1 (a)

EOR THE TOTAL SAMPLE

-		w ,	a is 마수 씨 마수 다 다 is color to the properties in properties	
Scc	re	6	F	SMF
1	-	10	15	12.00
11	-	20	21	29.00
21	-	30	51	33.67
31	-	40	29	44.33
41	-	50	53	48.67
51	-	60	64	46.6.
61	-	70	23	38.67
71	-	80	29	23.33
81	-	9 0	18	17.33
91	-	100	5	7.67
			Non-side (DF) spop And State (SS) man type had	
Tot	a l		308	
			ه المحالة المح	~~~~

Figure 4.1 represents the original and smoothed frequency polygons of Scholastic Readiness scores for the total sample.



EREQUENCIES

TABLE 4.1 (b)

RELEVANT STATISTICS OF SCHOLASTIC READINESS SCORES FOR THE TOTAL SAMPLE.

، بندم جديد مدي	هد هیبا شد) که بدی هند بخر بدو است ایری	ر خوبها جيدور هندا عندا احداد احداد اجته نوبا المداد المدا				
N	Mean	Median	Mode	SD	SK	Kur
، جمع کند بھی جبت رہے ا						~~~~~
308	46.80	47.67	49.41	21.97	-0.119	0.265

The scores of Scholastic Readiness are normally distributed in the total sample. The curve is negatively skewed and it is also platykurtic.

TABLE 4.1. (c)

FIDUCIARY LIMITS OF MEAN AND SD OF SCHOLASTIC READINESS SCORES LOH THE TOTAL SAMPLE.

		THE REPORT OF THE PORT OF THE REPORT OF THE PERSON OF THE	
Statistic	S.E.	. 95	.99
the can win be all not do not use the last the va-		and the second s	e para famili ding mengangan ang ang ang ang ang ang ang ang
Mean	1.25	44.34 - 49.25	43.56 - 50.02
SD	0.88	20.22 - 23.71	19.67 - 24.26
die 146 mm and 1645 kills gad add 2004 den 1465 one dest and		ر بين جين علي جيد بندر بندر جين جين المعارض المعارض المعارض المعارض المعارض المعارض المعارض المعارض المعارض ال	Al apper when their death types date offset a compart to the proper such table to the compart to the

The .95 and .99 confidence limits for the Mean and SD of Scholastic Readiness scores do not exhibit a wide range. This supports the normality of distribution and also the high degree of significance of the sample statistics.

SCHOLASTIC READINESS AND SEX

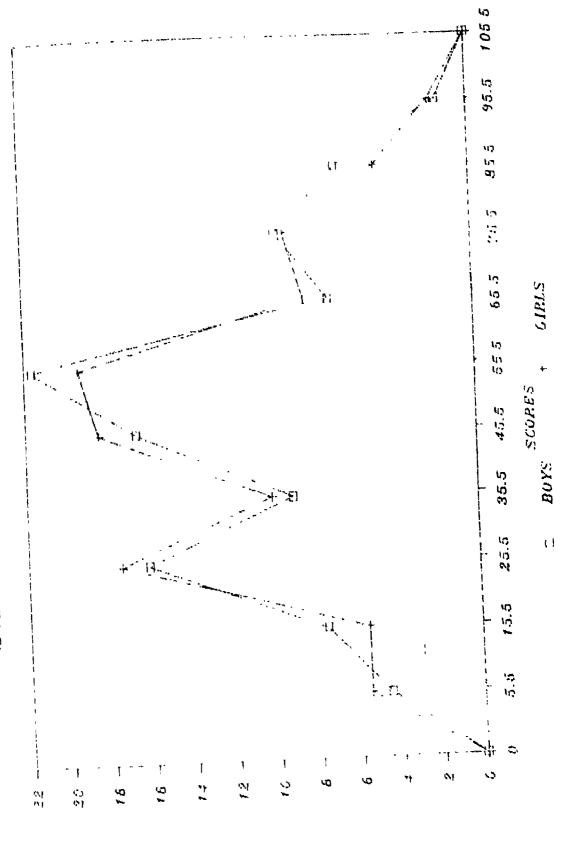
TABLE 4.2 (a)

DISTRIBUTION OF SCHOLASTIC READINESS

SCORES OF BDYS AND BIRLS

جدة إحد يؤدد وحد الحدة الحدة العدة العدي الحق عديد منته بعدة بركة حديد عدد العدد الخدر عدد	ية وليون القول عليه المورد حوال القول القول القول القول حوال (حوال القول الفقد الفقد القول الموال القول والموا ا	(in sur this loss III) (iii)
Scores	Boys %	Girls %
حدد الله الله الله الله الله الله الله ال	، منه سن جي جي شن شاه بات او جه کني وي شاه اين چه چيز چي خيد اين شه سال در اين شاه در اين اين جي وي	
1 - 10	4.52	5.50
11 - 20	7.54	5.50
21 - 30	16.08	17.43
31 - 40	9.05	10.09
41 - 50	16.58	18.35
51 - 60	21.61	19.27
61 - 70	7.04	8.26
71 - G O	9.55	9.17
81 - 90	6.53	4.59
91 - 100	1.51	1.83
	الله الله الله الله الله الله الله الله	

Figure 4.2 depicts the distribution of Scholastic Readiness scores for Boys and Girls in the form of frequency polygons. The frequencies are plotted as percentages.



co salonandava

RELEVANT SIATISTICS OF SCHOLASTIC READINESS
SCORES OF BOYS AND GIRLS

	ه مند بازد پرین های دانل سبب مین پیند پ		ن وقط وقت النبرة وبنت بنها بالربة كان شند *			
Group	Mean	Median	Mode	SD	SK	Kur
			,			
Boys	47.10	48.22	50.46	22.11	-0.152	0.261
Girls	46.23	46.75	47.78	21.70	-0.072	0.270

The distribution of Scholastic Readiness scores for the Boys and Girls are normally distributed with a slight variability. The curve of the distributions are negatively skewed, with the kurtosis being leptokurtic for boys and platykurtic for girls.

FIDUCIARY LIMITS OF MEAN AND SD OF SCHOLASTIC READINESS
SCORES FOR BOYS AND GIRLS

	الد شيبة الحجا مكان فقلك لمدير ووي ومن طبق بنيم يروب لبل	والمراجع الرباح خالفة ماسير مهمية مهمة والمراجع المؤمد مشتر يرباه ووجه ياسية يابية يجابز ياسة للسية للمالة للا	
Group	SEM	-95	. 95
د من جب با ت من منا ما مد بات ماه		ويه معه شير حدد دوما خدم ولك جهيل طفل عام چيچ كنند بانب ويرد يدن هياد مين عاون عدد درسه موي كا	البياة الله الدين المناسبة المناسبة الإنه البله الله الله الله الله الله الله ال
Boys	1.56	44.03 - 50.18	43.06 - 51.15
Girls	2,07	42.15 - 50.30	40.87 - 51.59
		الله المام بحث الله حيث جيت والله والمراجع الله المام عليه إليه إدارة إليها المام عليه جيد من المام إلى	المناف المنافز

TABLE 4.2 (c) - Luntd.

ng sail dan big ing am big bid M	다. (1) - 마니 시스 에서 WE WE NEED HER NO MER HOT HAL 제 중 나는 다	man ind. All 1 year over hast bell part deel neer hely open diffe half deep man man table was to be	
Group	SE OF SD	.95	.99
100 MP 401 Ad the tip 400 Ac to	ों के के बाद ती के कि	न्त्र होते. क्षेत्र कृत कृत कृति कृति नाहु हुक्त वक्त कर्त हिंदि करों कृति कर्ता कृत व्यक्त हुन्य व्यक्त स्थल 	医复数性毒性病毒 医皮肤 计图片 不少
Boys	1.11	19.92 - 24.29	19.23 - 24.98
Girls	1.47	18.81 - 24.59	17.89 - 25.51
mij 430 lije gaje dak dine dila dila	سر جو جو دہ ہیں ہیں جو بھے اپنے اپنے بھا ہے۔	ستب دين منها عبد نجا الله الله الله الله الله الله الله ال	

The .95 and .99 confidence limits for the Means and SDs of Scholastic Readiness scores for Boys and Girls do not have wide ranges, thereby indicating a fairly high degree of significance of the sample statistics.

SCHOLASTIC READINESS AND AGE

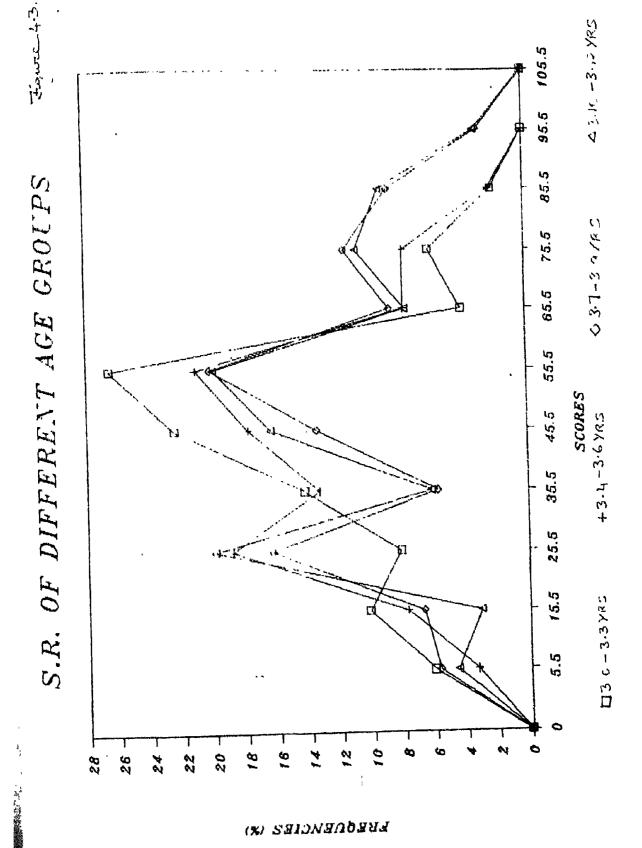
TABLE 4.3 (a)

DISTRIBUTION OF S.R. SCORES FOR THE DIFFERENT AGE GROUPS

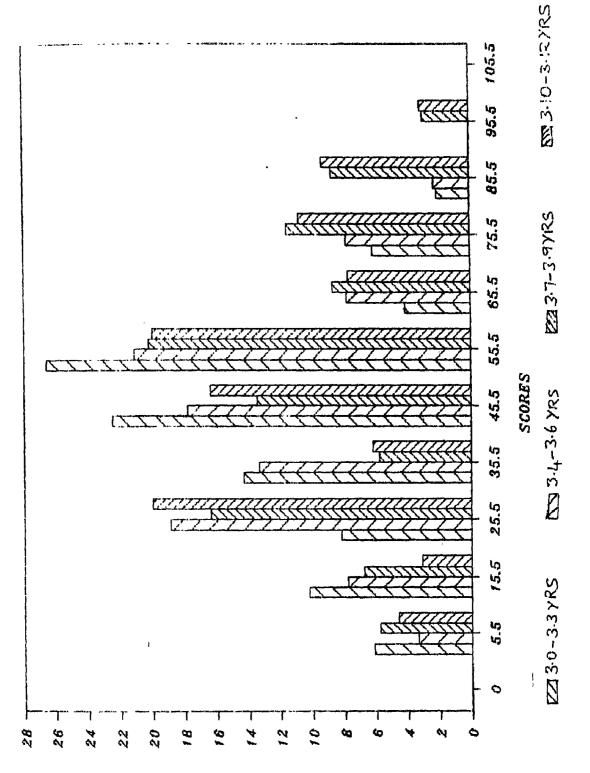
Scores	3 - 3.3 yrs. %	3.4 - 3.6 yrs. %	3.7 - 3.9 yrs. %	3.10 - 3.12 yrs %
- 120 CO (120 CO)	و فرست الأبارة مانت بدين عبي قبول بشينة شبيد دوبين بينك شبيد فرسد	ن وناب پیور ۱۸۱۵ کنگ کا باک کار واقع میں چکاہ ایسے باعث کانے میں باہور پانڈ	والمراجعين التلك المؤلد	
1 -10	6.12	3.33	5.76	4.61
11 -20	10.20	7.77	6.73	3.07
21 -30	8.16	18.88	16.34	20.00
31 -40	14.28	13.33	5.76	6.15
41 -50	22.46	17.77	13.46	15.38
51 -60	26.53	21.11	20.19	20.00
61 -70	4.08	7.77	8.65	7.69
71 -80	6.12	7.77	11.53	10.76
B1 -90	2.04	2.22	8.65	9.23
91-100	o	Ó	2.88	3.07

Figure 4.3 depicts the distribution of Scholastic Readiness scores for different age groups in the form of frequency polygons. The frequencies are plotted as percentages.

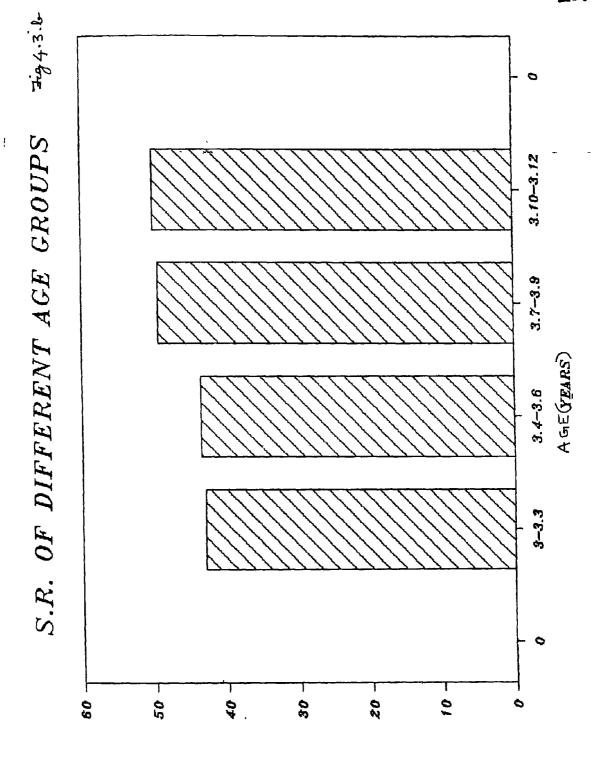
Figure 4.5(2) depicts the same in Bar diagram. Bar diagram of the Mean scores of the different age groups are given in figure 4.3 (b).



FREQUENCIES (X)



LEEGIBNCIES (x)



MEYN SCOBES

RELEVANT STATISTICS OF S.R. SCORES
FOR THE DIFFERENT AGE GROUPS

TABLE 4.3 (b)

~~~							~~ <del>~</del> .
والمنا ليرو	Group Yrs.	Mean	Median	Mode	SD	SK .	kur
1.	3.00-3.03	43.05	45.5	50.40	19.01	-0.386	0.240
2.	3.04~3.06	43.61	45.25	45.53	19.14	-0.25/	0.284
۷.	3.04 3.00	40 E (J I	40.20	70103	17.14	- O # 2 5 7	C-4 & C-4
3.	3.07-3.09	49.44	51.45	55.47	24.05	-0.251	0.307
4 .	3.10-3.12	50.12	50.88	52,42	23.21	-0.098	0.317
•						4.4.4.	

The distributions for all four groups are near normal with the curves negatively skewed. Excepting the 1st group which is leptokurtic all other distributions are platykurtic in nature.

FIDUCIARY LIMITS OF MEAN & SD OF SCHOLASTIC READINESS
SCORES FOR THE DIFFERENT AGE GROUPS

1. And the color of the color o			
Group Yrs.	SEM	.95	.99
1. 3.00-3.03	2.72	37.73 - 48.37	36.04 ~ 50.08
2. 3.04-3.06	2.02	39.66 - 47.57	38.41 - 48.87
3. 3.07-3.09	2.36	44.82 - 54.06	43.30 - 55.52
4. 3.10-3.12	2.88	44.47 - 55.76	42.69 - 57.54
		the first time that they are the spin with the same and spin time that the same time. I will be a first	

TABLE 4.3 (c) - Contd.

ومن جميد بيني والله	भी able 1935 करना पाल नकत किसे बतात श्रीती वार्थः अपेरे जुदा	الله الله الله الله الله الله الله الله	· · · · · · · · · · · · · · · · · · ·
Group Yrs.	SE OF SD	. 95	.99
1. 3.00-3.03	1.93	15.23 - 22.79	14.03 ~ 23.98
2. 3.04-3.06	1.43	16.33 - 21.95	15.45 - 22.84
3. 3.07-3.09	1.67	20.76 - 27.32	19.72 - 28.35
4. 3.10-3.12	2.04	19.20 - 27.22	17.94 - 28.48

The .95 and .99 confidence limits for the Means and SDs of all the groups have relatively narrow ranges. This indicates the significance of the obtained Means and SDs.

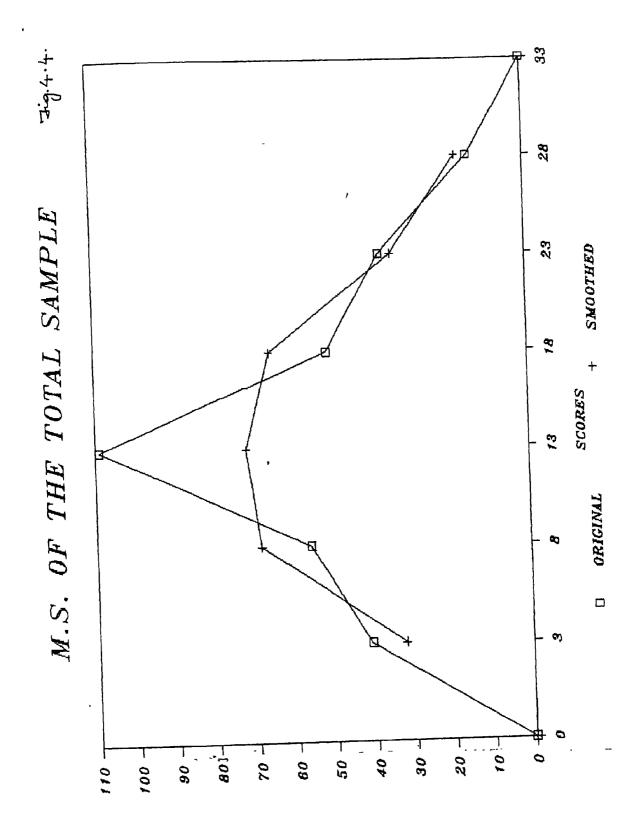
### MOTOR SKILLS

TABLE 4.4 (a)

## POR THE TOTAL SAMPLE

s eit i alem jegen wille geled vone, giltig lieben diest liende eines eines eines eines dies		
Scores	F	SMF
وم والمراجعة المراجعة	ه عليه فيه فيل في الله عليه الله عليه الله الله عليه الله الله الله الله الله الله الله ا	महोत प्रथम कार्य के बुद्धा प्रथम होता कियाँ पहल प्रथम व्यक्त प्रथम प्रथम प्रथम कार्य किया गाम राज्ये अस्थ
1 - 5	41	<b>32.3</b> 3
6 - 10	56	<b>48.</b> 67
11 - 15	109	72.00
16 - 20	51	65.67
21 - 25	37	34.00
26 - 30	14	17.00
	San pin him Mil Mil Mil Gad	
TOTAL	308	
r's delli fritt eite hier artif bille bed spin pres man unte såre gest gr	ك والله فيه فيه منت لينه بنيه بداء ليام بياه بنية منت كم منته بنيه بين درم جين بين بين عند عنه بين ك	

Figure 4.4 gives the original and smoothed frequency polygons of Motor skills scores for the total sample.



**E**BE**d**nenciez

1ABLE 4.4.(b)

## RELEVANT STATISTICS OF MOTOR SKILLS SCORES FOR THE TOTAL SAMPLE

		Median			SK	Kur
		. Ann 1882 (tall \$400 Tips god ajac bes				
308	13.47	13.11	12.40	6.63	0.163	0.243
				. All the day (10) and (10) and (10)	، نے میں میں میں جے میں تک شے ش	

The distribution of Motor Skills scores among the total sample of children is near normal. The skewness of the distribution is positive and the curve is leptokurtic.

TABLE 4.4 (c)

## FIDUCIARY LIMITS OF MEAN & SD OF MOTOR SKILLS SCORES FOR THE TOTAL SAMPLE

	- 140 140 140 140 140 140 140 140 140 140			
Statistics	SE	. 95	,99	
الله الله هوا خود هور الله الله عليه الله الله عنه الله الله الله الله الله الله الله ال		و الله المراد منه حود كان وجو جود حود الله المراد المراد المراد المراد الله المراد الله المراد المراد المراد المراد		
MEAN	0.37	12.72 - 14.21	12.49 - 14.44	
SD	0.26	6.10 - 7.16	5.94 - 7.32	
د و در من		نجية جمع ميم جيش جلت عبد نصل جمه جنان ملايه على مديد عبد عبد عبد المديد دوي ويت	هـ ب ور ان عا باد مي بها <u>نا ي</u> عرب مي مي بي	

The .95 and .99 confidence limits of the Mean and SD of Motor Skills scores have fairly narrow ranges, indicating that the sample statistics are almost dependable in terms of the degree to which they estimate the population parameters.

### MOTOR SKILLS AND SEX

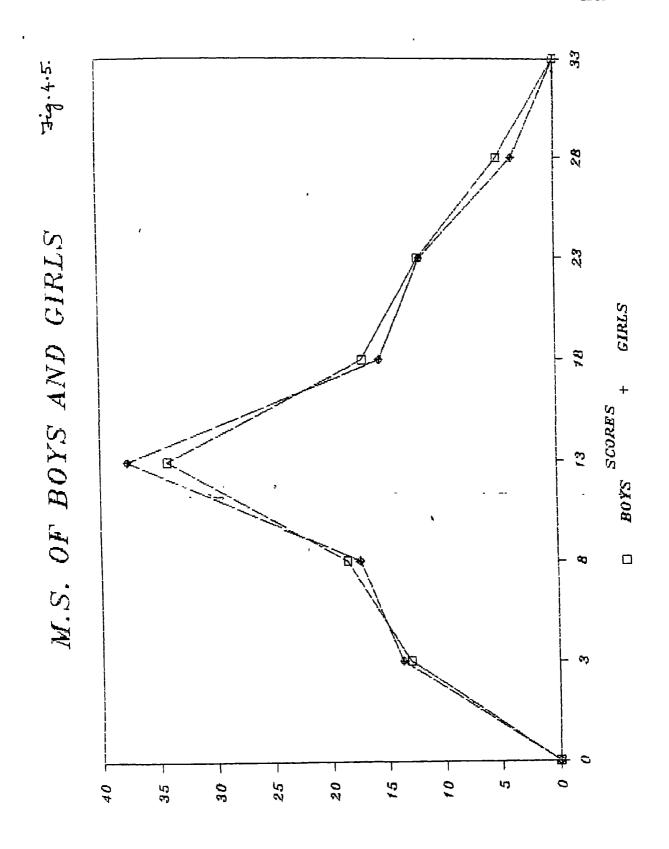
TABLE 4.5 (a)

DISTRIBUTION OF MOTOR SKILLS SCORES

OF BOYS AND GIRLS

		त्रक प्रमुख का अने क्षेत्र किंद किंद केंद्र तीन तीन पहुंच कीन और अंति किंद्र हुआ कर क्षेत्र क्ष्म कुछ कुछ कुछ कुछ 	· · · · · · · · · · · · · · · · · · ·
Sc	ores	Boys X	Girls %
1	- 5	13.06	13.76
6	- 10	18.59	17.43
11	- 15	34.17	37.61
16	- 20	17.0B	15.59
21	- 25	12.06	11.92
26	- 30	5.02	3.66

Figure 4.5 depicts the distribution of Motor Skills scores for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



EBEGNENCIES (%)

TABLE 4.5 (b)

RELEVANT STATISTICS OF MOTOR SKILLS

SCORES OF BOYS & GIRLS

+1 55 25 45 21		400 mm 400 01 72 40 774 475 575 575 575 5				
Group	Mean	Median	Mode	SD	SK	Kur
	in 100 Pm to 41 M to 65 to	16.00 Mar 16.01 Ara 100 Ara 10		ي نيم بيلو جيد الدي الدي بين الدي على الدي		
Boys	13.57	13.18	12.39	6.70	0,175	0.247
Girls	13.27	13.00	12.44	6.49	0.125	0.234
الكا ملك سي بيت لينه بيد بيد بيد			مند بناور جميد بوق الناور جواد الكراد خرد المدر			

The distribution of Motor Skills scores among boys and girls are almost normal. Both the distributions are positively skewed and are leptokurtic.

FIDUCIARY LIMITS OF MEAN & SD OF MOTOR SKILLS SCORES
OF BOYS & GIRLS

الأمال مثبات الباط المثال المثار أمام المثال المثال المثال المثال المثال المثال المثال المثال المثال	فيهم فيمن بالمن بالنب يهمن يسمع بيسم فيك يهلن بالبال بالبال بالبال بالبال مناسه موجه هجم ه	منطقة الماكان والماكان والماكان الماكان والماكان والماكان والماكان الماكان الماكان الماكان والماكان والماكان والماكان	*** *** *** *** *** *** *** *** *** **
Group	SEM	. 95	.99
Boys	0.47	12.64 - 14.51	12.35 - 14.80
Girls	0.62	12.05 - 14.49	11.67 - 14.87
	SE of SD		
Boys	0.33	6.04 - 7.37	5.83 - 7.58
Girls	0.44	5.62 - 7.35	5.35 - 7.62

The .95 and .99 confidence limits of the Means and SDs of Motor Skills scores for the boys and girls do not have wide ranges, thereby indicating a fairly high degree of significance of the sample statistics.

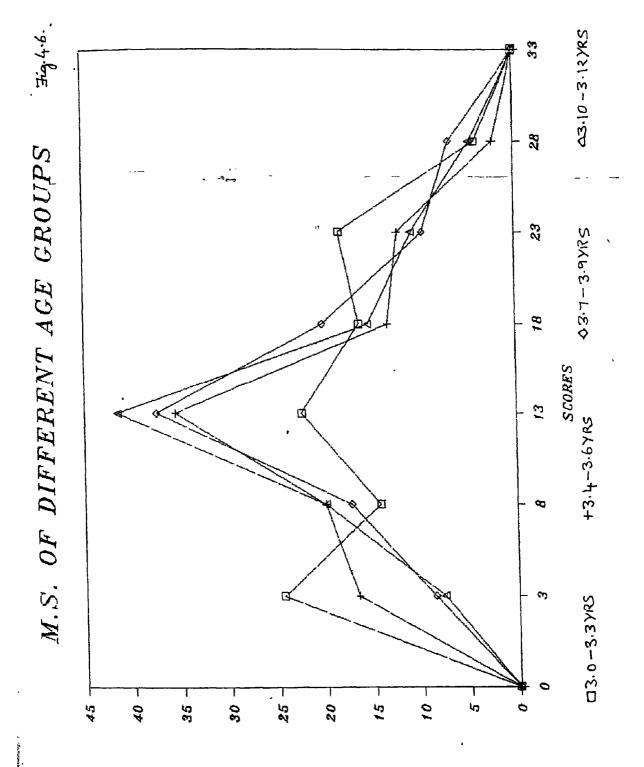
#### MOTOR SKILLS AND AGE

DISTRIBUTION OF MOTOR SKILLS SCORES
FOR THE DIFFERENT AGE GROUPS

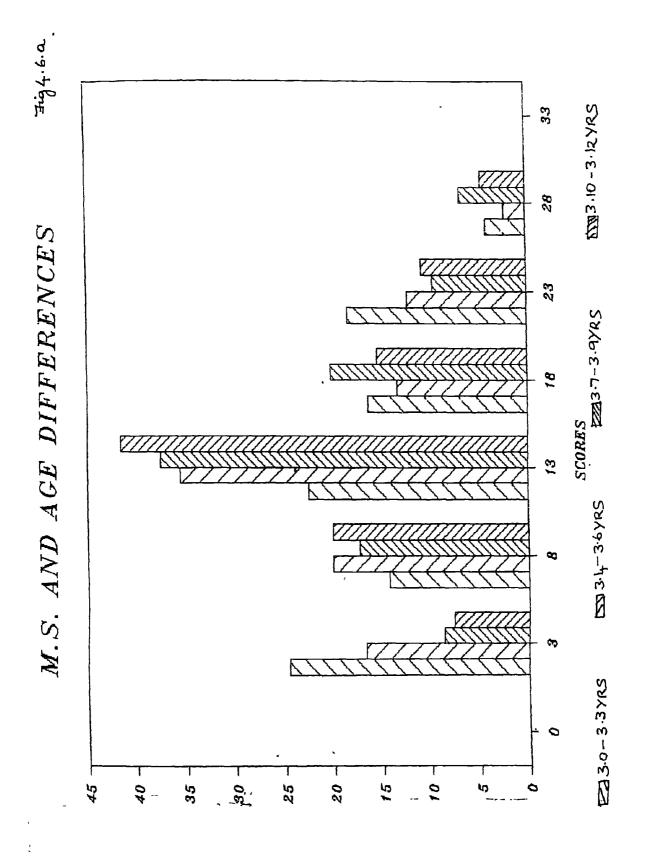
TABLE 4.6 (a)

Scores	3 - 3.3 yrs. %	3.4 - 3.6 yrs. %	3.7 - 3.9 yrs. %	3.10 - 3.12 yrs %
1 - 5	24.48	16.56	8.65	7.69
6 -10	14.20	20.00	17.30	20.00
11-15	22.44	35.59	37.50	41.50
16-20	16.32	13.33	20.19	15.38
21-25	18.36	12.22	9.61	10.76
26-30	4.0B	2.22	6.73	4.61

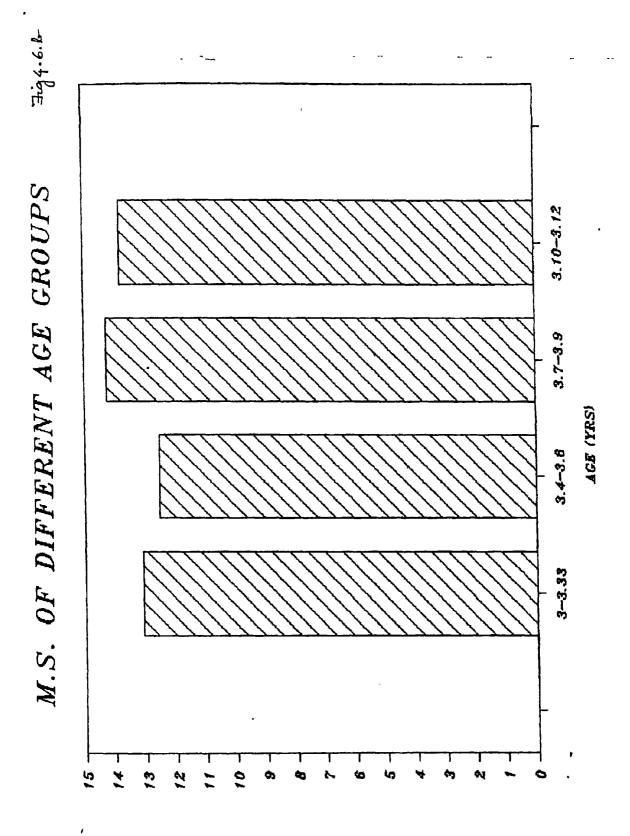
Skills scores for different age groups in the form of frequency polygons. The frequencies are plotted as percentages. Fig. 4.6(a) depicts the same in Bar Diagram. Bar Diagram of the Mean MS scores of the age groups are given in Fig. 4.6(b).



EBEGUENCIES (%)



**EBEGIENCIES** 



KEVN SCOBES

TABLE 4.6 (b)

RELEVANT STATISTICS OF MOTOR SKILLS SCORES

FOR THE DIFFERENT AGE GROUPS

	Group	Mean	Median	Mode	SD	SK	Kur
<u>_</u>	Yrs.		وليت والذي بونية وينتان والكان بدعة الكانة الإنجاء الإنجاء	~			
1.	3.00 ~ 3.03	13.10	13.00	12.79	7.72	0.039	329
2.	3.04 - 3.06	12.55	12.37	12.01	6.48	0.083	238
3.	3.07 - 3.09	14.25	13.70	12.61	6.42	0.257	227
4.	3.10 - 3.12	13.76	13.18	12.01	6.09	0.286	223

The age-wise distributions of Motor-skills scores are almost normal. All of them are positively skewed, with the Kurtosis being highly platykurtic for group 1 and leptokurtic for the others.

TABLE 4.6 (c)

FIDUCIARY LIMITS OF MEAN & SD OF MOTOR SKILLS

SCORES FOR DIFFERENT AGE GROUPS

		من هيئة من هند من هند هند عبد الحمل بندة فعد لهند بنية من عمل منه هند هند هند هند هند عبد مند	
Group Yrs.	SEM	. 95	.99
1. 3.00-3.03	1.10	10.93 - 15.26	10.25 ~ 15.94
2. 3.04-3.06	0.68	11.21 - 13.89	10.79 - 14.31
3. 3.07-3.09	0.62	13.01 - 15.48	12.62 - 15.87
4. 3.10-3.12	0.75	12.28 - 15.25	11.82 - 15.71

TABLE 4.6 (c) - Contd.

पुत्रको स्थाने स्थान परण केंद्र र ते स्थान राज्य स्थाने हरू ते हैं।	NOTE THE PARTY OF	न थ. व शिवार्षन में उपलब्ध के प्रशिक्ष प्रशिक्ष प्रशिक्ष प्रशिक्ष प्रशिक्ष प्रशिक्ष प्रशिक्ष प्रशिक्ष प्रशिक्ष	तन्त करते हेवत साम प्रकंत मेंद्रा क्षेत्र क्षेत्र क्षेत्र स्थान कर्ण क्ष्मी स्थान स्थान सामी असी
Group Yrs.	SE of SD	. <b>95</b> 	.99
1. 3.00-3.30	0.79	6.18 - 9.26	5.70 - 9. ⁷ 4
2. 3.04-3.06	0.48	5.53 - 7.43	5.23 - 7.73
3. 3.07-3.09	0.44	5.54 - 7.29	5.26 - 7.51
4. 3.10-3.12	0.53	5.03 - 7.14	4.70 - 7.47
يدة وجو بري سيد بيات لزان هند مر يا دراية وي عند نده مند		ب سد الله الله الله الله الله الله الله الل	- <b>(8) (18) - 14</b>   <b>15</b>   <b>15</b>

The .95 and .99 confidence limits for the Means and SDs of all the age-groups have relatively narrow ranges indicating the significance of the obtained means and standard deviations.

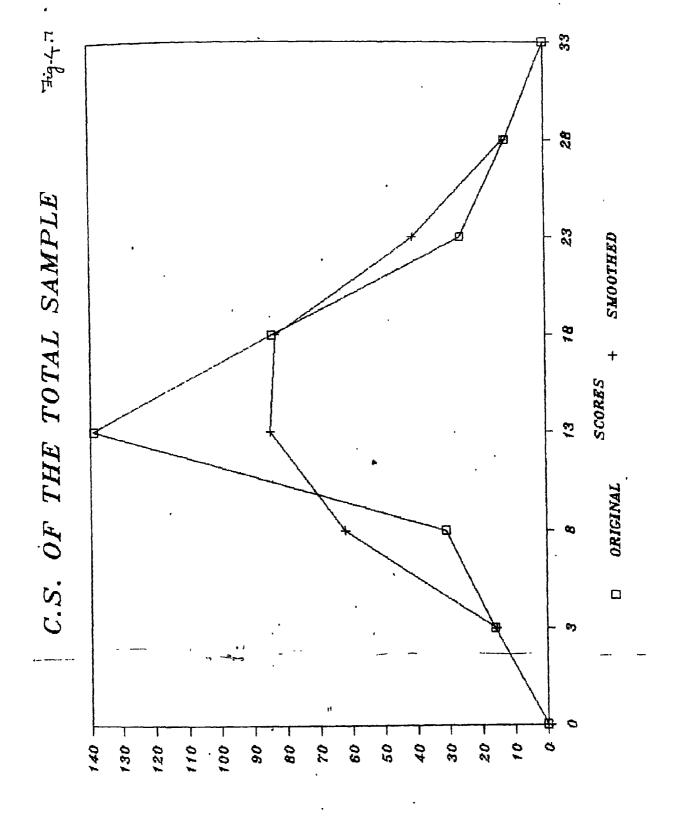
### COGNITIVE SKILLS

TABLE 4.7(a)

# SCORES FOR THE TOTAL SAMPLE

·····································					
Scores	F	SMF			
1 - 5	16	15.67			
6 - 10	31	62.00			
11 - 15	139	B4,67			
16 - 20	84	83.00			
21 - 25	26	40.67			
26 - 30	12	12.67			
TOTAL	308				
# W & TO NO NO TO AL IN THE TO THE P	يست ميند ميند مين مين مين مين بين مين بين مين مين مين مين مين مين مين مين مين م	مسا عدد المداعية على المداعية على المداعية المداعية المداعية المداعية المداعية المداعية المداعية المداعية المدا			

Figure 4.7 gives the original and smoothed frequency polygons of cognitive skills scores for the total sample.



**EBEGNENCIE**Z

TABLE 4.7(b)

### RELEVANT STATISTICS OF COGNITIVE SKILLS SCORES FOR THE TOTAL SAMPLE

امها نیبر که بید ها بید ها سه که						
N	Mean	Median	Mode	SD	SK	kur
308	14.77	14.35	13.51	5.35	0.236	0.235
		و مدة دعو بشار شوا هذه سن يجو بيان بيدة د				

The scores of cognitive skills are normally distributed in the total sample. The curve is positively skewed and it is also leptokurtic.

1ABLE 4.7 (c)

### FIDUCIARY LIMITS OF MEAN & SD OF COGNITIVE SKILLS SCORES FOR THE TOTAL SAMPLE

ہ جسے واقع کینے بہت جیٹ خانے سند شنو چیت ہے۔ سے سی سنت ہیں		ويوم بينها الدوار على النوم المنظ العن الدور جدة المنظل الدوار الدوار الدوار الدوار الدوار الدوار الدوار الدوا والدوار الدوار	
Statistic	SE	. 95	.99
(* In P. Life main and 660 office were man while then while allied 1660	- gray space type has been purely as the Many	र । अर्थ के के कि	
Mean	0.30	14.17 - 15.37	13.98 - 15.56
SD	0.22	4.92 - 5.77	4.79 - 5.91
P. C. Ster. House, Select sterr. Sport. House drawn State, graph transp. Holder of	الله الماري المارية	والمرا المرا والمرا	

The .95 and .99 confidence limits for the Mean and SD do not exhibit a wide range. This supports the normality of distribution and also the high degree of significance of the sample statistics.

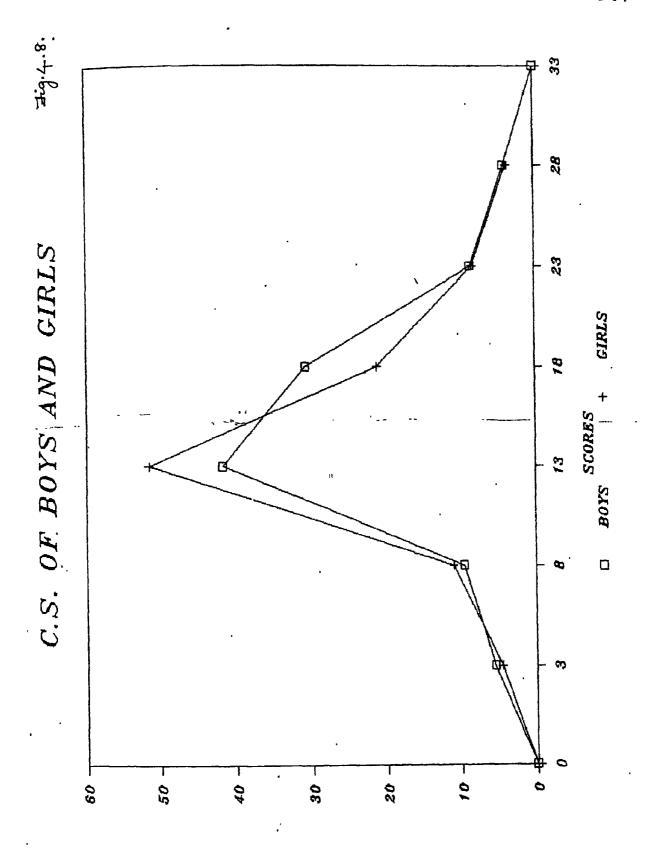
#### COGNITIVE SKILLS AND SEX

TABLE 4.8 (a)

# SCORES OF BOYS AND GIRLS

Scores	Boys X	Girls %
1 - 5	5.52	4.58
6 - 10	9.54	11.00
11 - 15	41.70	51.37
16 - 20	30.65	21.10
21 - 25	8.54	8.25
26 - 30	4.02	3.66
n a fills and one one fill and ipp, the offs and one flow the till the bit.	नको सबी। प्रति होते प्रकृत प्रकृत केल हिन्दी स्थित प्रति प्रति काला काला सबी। स्थूल प्रति नेवार स्थान प्रकृत स्थान	toon the next took took the same jobs than sain, shot tops the and he's ing -e and heat the jobs

Figure 4.8 depicts the distribution of Cognitive Skills scores for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



PREQUENCIES (%)

TABLE 4.8 (b)

RELEVANT STATISTICS OF COGNITIVE SKILLS

SCORES FOR BOYS AND GIRLS

,au	ن جيت مين جي جيد بين شية بين سي علي بي	در مورد میں میں میں بیٹر بیٹر بیٹر بیٹر ہوت وہ	حجه جهه داخل شارة وغان حجم بوجد ميس			
Group	Mean	Median	Mode	SD	SK	Kur
Boys	14.96	14.69	14.14	5.42	0.149	0.239
G1rl#	14.42	1.5.85	12.70	5.21	0.320	0.218

The cognitive skills scores are almost normally distributed in the two groups of boys and girls. The distributions are positively skewed, the skewness being more for the girls.

FIDUCIARY LIMITS OF MEAN & SD OF COGNITIVE SKILLS SCORES
FOR BOYS AND GIRLS

마는 마			
Group	SEM	.95	.99
Bays	0.38	14.21 - 15.71	13.97 - 15.95
Girls	0.50	13.44 - 15.40	13.14 - 15.71
	SE OF SD		
Boys	0.27	4.88 - 5.95	4.71 - 6.12
Girls	0.35	4.51 - 5.90	4.29 - 6.12
		ومراه فيته بينها في منه فيه فيه فيه فيه فيه فيه فيه وي ويه ويه ويه ويه ويه ويه ويه ويه وي	

The .95 and .99 confidence limits for the Means and SDs of Cognitive Skills of both the sexes have fairly narrow ranges, denoting the high dependability of these sample statistics.

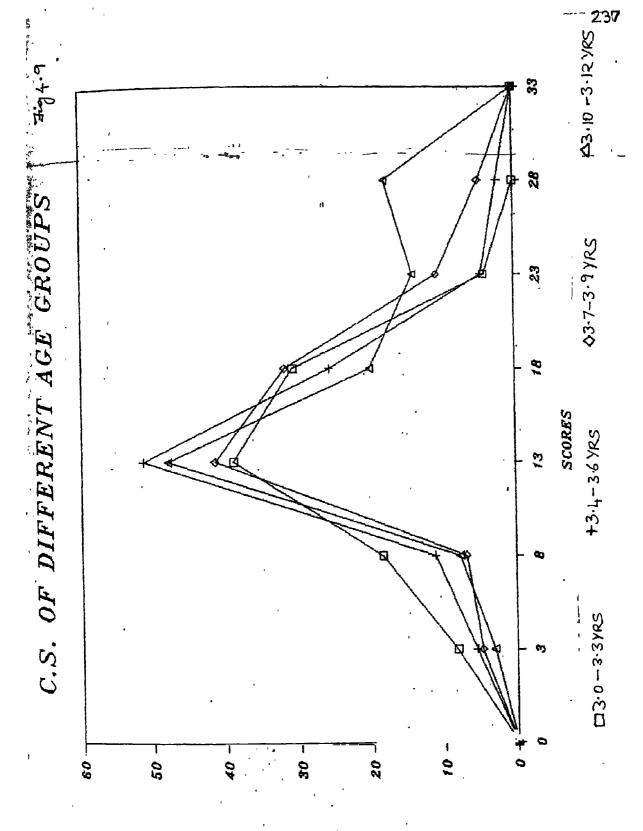
#### CUCHTILVE SKILLS AND AGE

DISTRIBUTION OF COGNITIVE SKILLS SCORES
FOR THE DIFFERENT AGE GROUPS

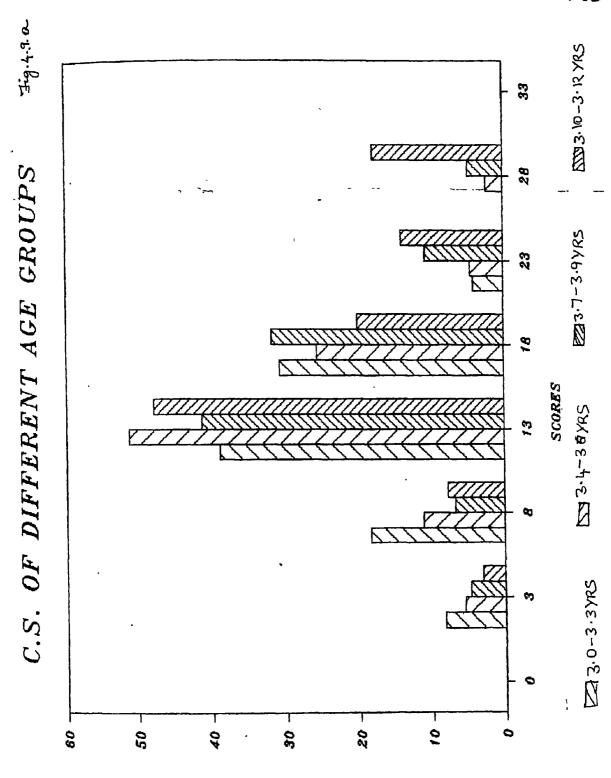
TABLE 4.9 (a)

Scores	3 - 3.3 yrs. %	3.4 - 3.6 yrs. %	3.7 - 3.9 yrs. %	3.10 - 3.12 yrs %
1 - 5	0.16	5.55	4.80	3.07
6 10	16.36	11.11	6.73	7.69
11 - 15	38.77	51.11	41.34	47.69
16 - 20	30.61	25.55	31.73	20.00
21 - 25	4.08	4.44	10.57	13.84
26 - 30	0	2.22	4.80	17.69

Figure 4.9 depicts the distribution of cognitive skills scores for different age groups in the form of frequency polygons. The frequencies are plotted as percentages. Figure 4.9(a) depicts the same in Bar liagram. Bar diagram of the Mean scores of C.S. for the age group are given in fig. No. 4.9 (b).



FREQUENCIES (%)



EBEGORNCIES (%)

MRVN SCOKES

RELEVANT STATISTICS OF COGNITIVE SKILLS
SCORES FOR THE DIFFERENT AGE GROUPS

بالمها مذهد خروان عديلة شمل لهجات فعدد مازام لهيك إنامار ويول وحور موال		ينها وها و داخل الله موسد الموسود المو			···	
Group Yrs.	Mean	Median	Mod e	SD	8K	kur
1. 3.00-3.03	13.20	13,53	14.17	4.94	-0,200	0.259
2. 3.04-3.06	13.95	13.76	13.39	4.82	0.118	0.227
3. 3.07-3.09	15.55	15.15	14.36	5.42	0.221	0.250
4. 3.10-3.12	15.85	14.61	12.15	5.75	0.646	0.261
اسا جاء جاء باب نبي جاء عند سر عمر عمر بين	، حدد شدد سد سب مصر دشر	ی خار میہ انگ سب سے ایک خو اسد سے خام	. سب مرد مورد کند عدد عدم منزد به			

The distributions for all the four groups are near normal, with the curves being positively skewed, excepting the 1st group. All the distributions are leptokurtic.

FIDUCIARY LIMITS OF MEAN & SD OF COGNITIVE SKILLS SCORES
FOR THE DIFFERENT AGE GROUPS

Group	SEM	.95	.99
1. 3.00-3.03	0.71	11.82 - 14.59	11.38 - 15.03
2. 3.04-3.06	0.51	12.95 - 14.94	12.63 - 15.26
3. 3.07-3.09	0.53	14.51 - 16.59	14.18 - 16.92
4. 3.10-3.12	0.71	14.45 - 17.24	14.01 - 17.69

TABLE 4.9(c) - Contd.

and you all the tief my los one is all only by 41	يوه ويو الآو الأول أنه الأول الآول الآ	Har mai 145 dell 1850 albi 1760 (115) bius dis dus dict met latt etat das dall dals dell	160 160 160 160 160 160 160 160 160 160
Group	SE OF SD	.95	.99
내 과 바 등 등 등 등 등 등 등 등 등 등 등 등	ڈیٹ 600 AM مال ایک ایک میٹر نہیں میں سے	کیا کیا بازی فیم نمو نمو هم می شوا می ایش این این بی به بازی می وی میز دن می میت شود	کیا ہے جب جب جب بہت ہیں <u>ہیں ہیں اس با</u> ٹھ نہیں ہیں میں
1. 3.00-3.03	0.50	3.96 - 5.93	3.65 - 6.24
2. 3.04-3.06	0.36	4.12 - 5.53	3.89 - 5.76
3. 3.07-3.09	0.38	4.68 - 6.15	4.44 - 6.39
4. 3.10-3.12	0.51	4.76 - 6.74	4.44 - 7.06
		#	

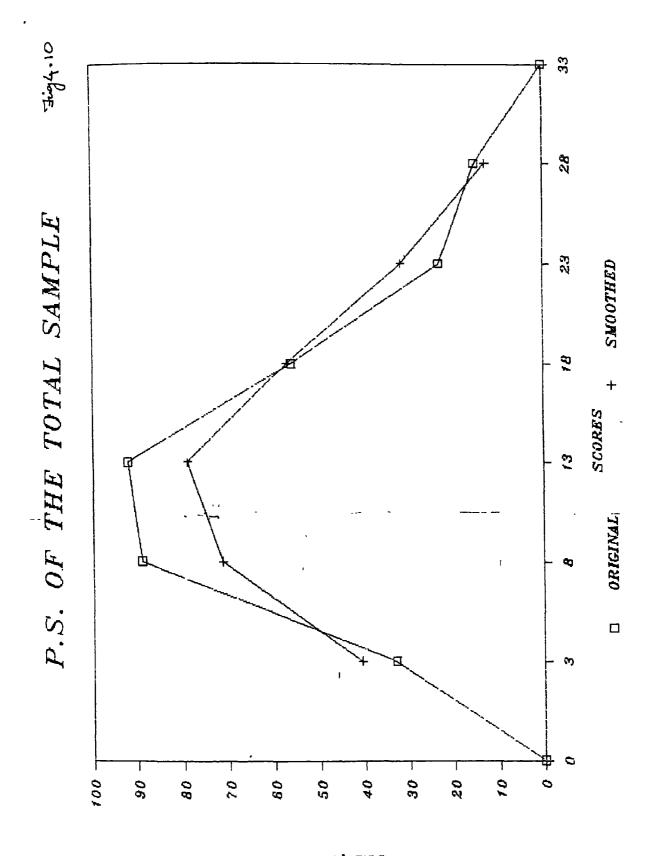
The .95 and .99 confidence limits for the Means and SDS of all the groups have relatively narrow ranges. This indicates the significance of the obtained Means and SDs.

TABLE 4.10(a)

## DISTRIBUTION OF PSYCHOSOCIAL SKILLS SCORES FOR THE TOTAL SAMPLE

발생들 사 후 박 및 수 발 등 후 발 등 수 들 이 수 있다.	و والله عليه بوات جود حدد الله عليه الله الله الله الله الله الله الله ا	الله الله الله الله الله الله الله الله
SCORES	F	SMF
ت نوبة وبينة فرود على على 194 من الله من أنه بعث منه أفرة يهي فود عام والأو الله أود عام والأو	में क्रिके त्यारा प्रणा प्रणा प्रणा पीति क्रिके क्रिके प्रणा प्रणा प्रथम प्रथम प्रथम प्रथम क्रिके क्रिके हिंदी प्रथम प्	
1 - 5	33	40.67
6 - 10	89	71.33
11 - 15	92	79.00
16 - 20	56	57.00
21 - 25	23	31.33
26 - 30	15	12.67
	and \$17 Spec year than total To PME Way	
Total	308	
ما فيها ومن بالبار والم المن المن المن المن المن المن المن ا	and \$10 Will wise to Strift grant strate rapids your come gate states gave may grid you	alan kin man प्रकृत करते हेंतुन करते पीत् करण करते, काम प्रकृत कुछी वृत्त करण पान, करते केंग गण जाना हुए, हिंगी पान

Figure 4.10 gives the original and smoothed frequency polygons of Psychosocial skills scores for the total sample.



EBEGNENCIES

TABLE 4.10 (b)

## RELEVANT STATISTICS OF PSYCHOSOCIAL SKILLS SCORES FOR THE TOTAL SAMPLE

N	Mean	Median		SD		,,,_,
308	12.87	12.23	10.97	6.39	0.254	0.267
	ه منځ ونډ مک مانه ليبا مک پنۍ بني س					

The distribution of Psychosocial scores for the total sample is fairly normal. The distribution is positively skewed and slightly platykurtic in nature.

TABLE 4.10 (c)

## FIDUCIORY LIMITS OF MEAN & SD OF PSYCHOSOCIAL SKILLS SCORES FOR THE TOTAL SAMPLE

ين جين ويڙا جين والد من جين الله والية خط جين جين البيا لها:	جمه بعدي المثلة المدين	والمرا	ومديد بالله ولهان مشد بدائمة مديد بشد بدائم والمال والمال والمال والمال والمال والمال والمال والمال
STATISTIC	SE	. 95	.99
hat had not districted him cold hade very to their sols pe	الله المراجعة المراجعة المراجعة المراجعة ال	والمرافقة والمرافقة المنافقة بالمرافقة المنافقة المرافقة المرافقة المرافقة المرافقة المرافقة المرافقة والمرافقة	
Mean	0.36	12.15 - 13.58	11.93 - 13.81
SD	0.25	5.88 - 6.90	5.72 - 7.06
	and appearance from the space over their time are then blind	مرهم محمد ومهر مرهم محمد بندس مجاره بنواء مدرك ومجار فلاي ويجار ومجار ومجار المجار المحمد ومحمد محمد مخمد	هن هند سند دند بين ميم بند سند سبد هن چې کې بند ويي وند

The .95 and .99 confidence limits for the Mean and SD of Psychosocial scores for the total sample have very narrow ranges. This implies that the sample statistics are dependable as true measures.

#### PSYCHOSOCIAL SKILLS AND SEX

[ABLE 4.11 (a)

## DISTRIBUTION OF PSYCHOSOCIAL SKILLS SCORES FOR BOYS AND GIRLS

स्कृतक के जान संस्था व को किए कुछ पाने स्थाप पाने संशे प्रशास स	والمها والمنافذ المنافذ المنافز المناف	201 Tay 277 Last 167 and 168 And 168 (all 168 pay 168 and 164
Scores	Boys %	Girls %
1 - 5	11.05	10.09
6 - 10	28.14	30.27
11 - 15	30.65	28.44
16 - 20	18,59	17.43
21 - 25	7.03	8.25
26 - 30	4.52	5.50
1877 البلة كان سال كان على فسد بيول ابلك بيد بيسر بابل النه	جون يدام إنتان الله والله والله مناه والله والله الله الله الله والله والله والله والله والله والله	مين بين لين يون پيڻ چاڻ بند شان لين الين عين لين آلي وي

Figure 4.11 depicts the distribution of Psychosocial skills for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.

<u>۸40</u>

EBEGUENCIES (%)

TABLE 4.11 (b)

RELEVANT STATISTICS OF PSYCHOSOCIAL SKILLS

SCORES FOR BOYS AND GIRLS

Group	Me an	Median	Mode	SD	sk	Kur
Boys	12.79	12.26	11.18	6.31	0.252	0.268
Girls	13.00	12.19	10.58	6.53	0.372	0.268
			بين براي سيد شدر جرب واي الله الله			

The distribution of psychosocial scores for the boys and girls are near normal. Both the distributions are positively skewed, the skewness being more for the girls. Both the distributions are slightly platykurtic in nature.

TABLE 4.11 (c)

FIDUCIARY LIMITS OF MEAN & SD OF PSYCHOSOCIAL SKILLS

SCORES FOR BOYS AND GIRLS

		. W. 1986 THE THE STREET AND THE THE THE STREET AND THE STREET AND THE STREET AND THE STREET AND THE	
Group	SEM	.93	.99
Boys	0.44	11.92 - 13.67	11,64 - 13,95
Girls	0.62	11.77 - 14.22	11.38 - 14.61
	SE OF SD		
Boys	0.31	5.69 - 6.94	5,49 - 7.13
Girls	0.44	5.66 - 7.40	5.38 · 7.67
		_	

The .95 and .99 confidence limits for boys and girls have fairly narrow ranges, implying that the sample statistics are highly dependable.

#### PSYCHOSOCIAL SKILLS AND AGE

TABLE 4.12 (a)

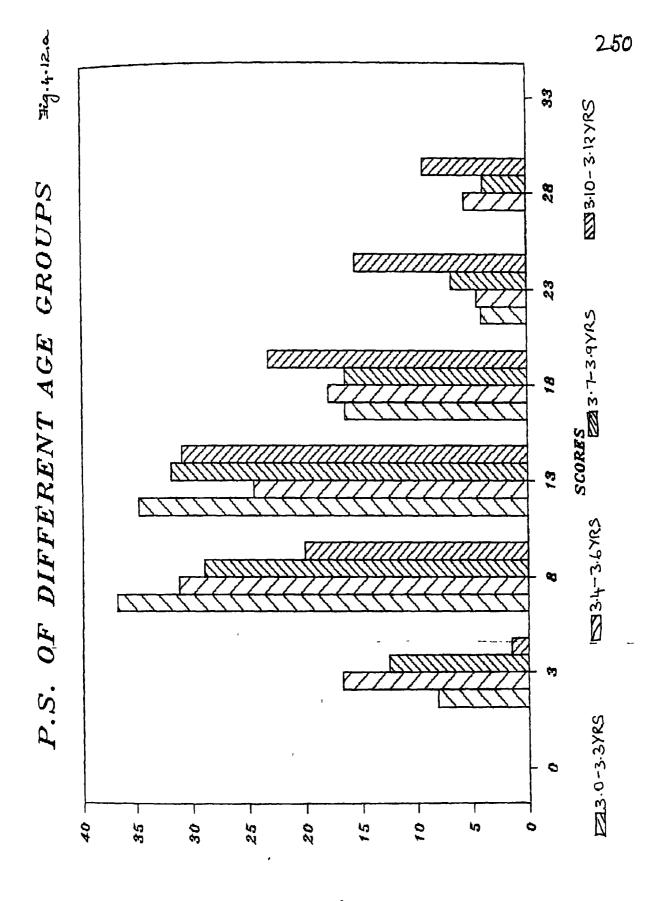
DISTRIBUTION OF PSYCHOSOCIAL SKILLS SCORES

FOR THE DIFFERENT AGE GROUPS

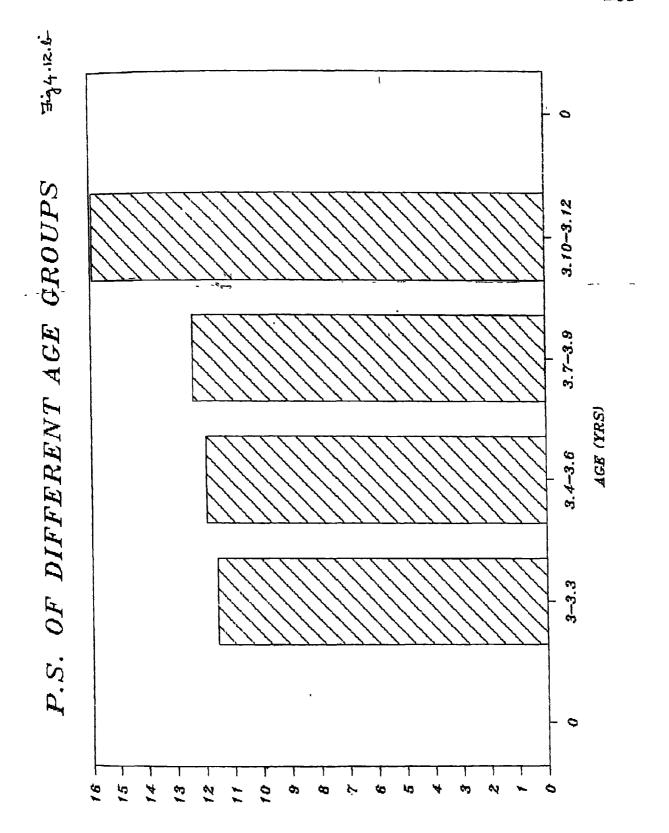
ال هوا نجب بين يهم الله ليب يبي	N THE REAL PROPERTY AND REAL PROPERTY AND REAL PROPERTY.		ين والله الله الله الله الله الله الله الل	
Scores	3 - 3.3 yrs. %	3.4 - 3.6 yrs. %	3.7 - 3.9 yrs. %	3.10 - 3.12 yrs %
		و وزون شد جب جوب 193 کی فیل 195 میں خبر کارہ جو خبر کارہ جون فات	وي فيها الجور موان ويول الجور بين المنا عرب مين الجور وي	
1 - 5	8.16	16.66	12.5	1.53
6 -10	36.73	31.11	28.84	20.00
11 -15	34.69	24.44	31.73	30.76
16 -20	16.32	17.77	16.34	23.07
21 -25	4.08	4.44	6.73	15.38
26 -30	0	5.55	3.84	9.23
الحلة خال مي جيه لند غنر		ته علية وهم جين شؤه للماة ولتم والدي والماء والماء والماء والماء والماء والماء	APS AND THE	

psychosocial scores for different age groups in the form of frequency polygons. The frequencies are plotted as percentages. Fig. 4.12 (a) depicts the same in Bar Diagram. Bar diagram of Mean Scores of psychosocial skills is depicted in fig. 4.12(b).

EREGUENCIES (x)



FREQUENCIES (%)



MEYN ZCOKEZ

RELEVANT STATISTICS OF PSYCHOSOCIAL SKILLS FOR
THE DIFFERENT AGE GROUPS

TABLE 4.12 (b)

***	لمية وحلة جين ليك حمة ديك لمنك حينا نات ويب الدي شمر الله	<del></del>	ي هوي خواه الله الله الله الله الله الله الله ا	يس خيب بينه سي يکو هور انظا مراه ده	ب بنب کند می بین مار رو می بین		
	Group Yrs.	Mean	Median	Mode	SD	SK	Kur
_	1. 3.00-3.03	11.57	11.23	10.56	4.84	0.210	0.272
	2. 3.04-3.06	11.94	10.95	8.97	6.68	0.444	0.277
	3. 3.07-3.09	12.37	11.86	10.84	6,22	0.246	0.256
	4. 3.10-3.12	15.92	15.12	13.52	6.31	0.380	0.265

The distribution of psychosocial scores for the various age groups are near normal. All the four distributions have positive skewness. Excepting group 3, which is leptokurtic in nature, the other groups are platykurtic.

FIDUCIARY LIMITS OF MEAN & SD OF PSYCHOSOCIAL SKILLS
FOR THE DIFFERENT AGE GROUPS

		والمرافقة فتقد فيست فلنف سنت فيل ينتان بيات البان بيان ويوان وول المان ويس مرابع مان المان والم	a managatang tagan pang tagan dalih sami dan menang dalih sami dan menanggalan sami sami
Group Yrs.	SEM	. 95	.99
1. 3.00-3.03	0.69	10.21 - 12.92	9.78 - 13.35
2. 3.04-3.06	0.70	10,56 - 13.32	10.12 - 13.76
3. 3.07-3.09	0.61	11.17 - 13.57	10.79 ~ 13.95
4. 3.10-3.12	0.78	14.38 - 17.45	13.90 ~ 17.94

TABLE 4.12 (c) - Contd.

表 表 表 表 表 表 表 表 表 表 表 表 表 表 表 表 表 表 表			
Group Yrs.	SE OF SD	.95	. <b>99</b>
1. 3.00-3.03	0.49	3.88 ~ 5.80	3.57 - 6.11
2, 3.04-3.06	0.50	5.70 - 7.66	5.39 - 7.97
3. 3.07-3.09	0.43	5.37 - 7.07	5.10 - 7.34
4, 3.10-3.12	0.55	5.22 - 7.40	4.88 ~ 7.75
	age and dall the only to the 1981 for	ता अनेपंत्रकार कृत्ये का राष्ट्रकृति के से क्राप्ट लग्नुहरू अन्यकृत स्थापित कृत्ये का स्थापित क्राप्ट क्राप्ट	भारे करा करते अर्था स्थापन करता किसी स्थापन करते तथा प्रमुख करूर र संस्थापन क्रमी स्थापन करता की

The .95 and .99 confidence limits for the Means and SDs of psychosocial scores of the different age groups do not have broad ranges. This attributes to the high dependability of sample statistics.

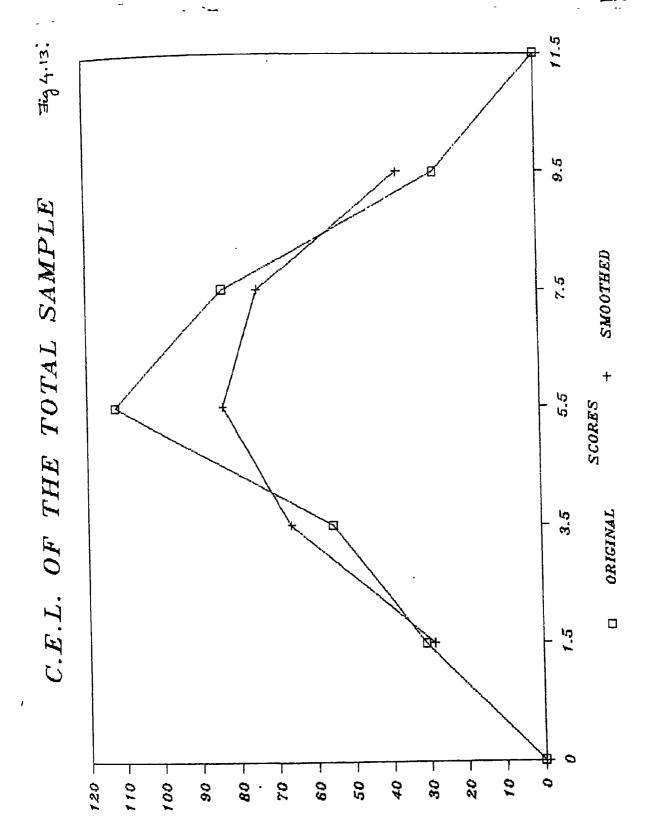
### COMPRCHENSION OF ENGLISH LANGUAGE

TABLE 4.13 (a)

# DISTRIBUTION OF COMPREHENSION OF ENGLISH LANGUAGE SCORES FOR THE TOTAL SAMPLE

ا شريح عليه مواد مواد يوم ليون مواد مواد مواد مواد مواد مواد مواد مواد	نظر الله الله الله الله الله الله الله الل	위에 Carl last 위치 유럽는 시청는 14점 14점 14점 14점 14점 14점 14작 모두 모두 모두 모두 모두 모든 24는 14는 모든 모든
Scores	F	SMF
,		
1 - 2	31	28.67
3 - 4	55	66.00
5 - 6	112	83.33
7 - 8	63	74.00
9 - 10	27	36.67
	pap was such pick bird from year	
Total	308	
	ومن ميد ميد ويون الله الله منه ويون ويون الله الله الدون ويون الله الله الله الله الله الله الله الل	

figure 4.13 gives the original and smoothed frequency polygons of comprehension of English language scores for the total sample.



FREQUENCIES

TABLE 4.13 (b)

## RELEVANT STATISTICS OF COMPREHENSION OF ENGLISH LANGUAGE SCORES FOR THE TOTAL SAMPLE

	罗贝中女 化电子 的复数人名英格兰 可含醇 打倒 电电影 自治 经实实 电电阻 医身性 医血管 计分析 医二种 化二甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲甲					
N	Mean	Median	Mode	SD	SK	Kur
					·	_~~~~
308	5.62	5.71	5.88	2.18	-0.123	0.263

The distribution of comprehension of English language scores for the total sample is near normal. The distribution has negative skewness and is mesokurtic in nature.

TABLE 4.13 (c)

## FIDUCIARY LIMITS OF MEAN & SD OF COMPREHENSION OF ENGLISH LANGUAGE SCORES FOR THE TOTAL SAMPLE

وي جين هيد نيو جي جي يت بيد جي الله يُقد سند بند بي جي	a mang a tea shipat kema alam angan angan mang mang mang angan angan angan angan angan angan angan angan angan	سائلة والمراجع الكلية المراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع	
Statistic	SE	.95	,99
والمراوية	o this delig cells and a st black bloom that soon their update and	سوا حود دور مده سه و به بها بها تبدأ حود الله عال الله و المدر وي فيه رفاه وجه فود	ا الله الله الله الله الله الله الله ال
Mean	0.12	5.38 - 5.87	5.30 ~ 5.95
SD	8.85	2.01 - 2.36	1.95 - 2.41
	r was diggs plays sing yeld and save read for 2014. So 1-de	ومور المراد المر	

The .95 and .99 confidence limits for the Mean and SD of Comprehension of English Language scores are highly narrow in their ranges, thus implying that the sample statistics are dependable as true measures.

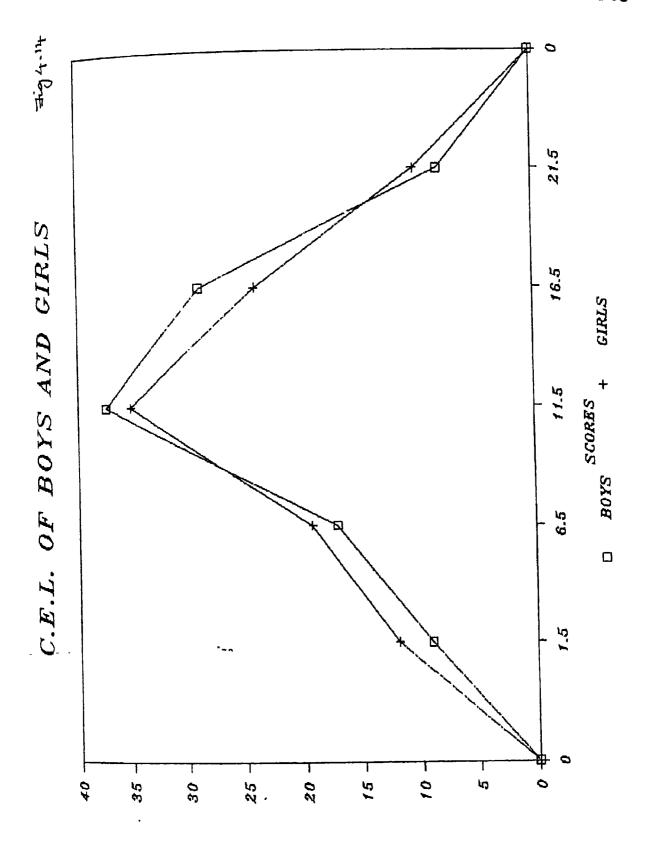
## COMPREHENSION OF ENGLISH LANGUAGE AND SEX

TABLE 4.14(a)

# DISTRIBUTION OF COMPREHENSION OF ENGLISH LANGUAGE SCORES FOR BOYS AND GIRLS

# 4 10 4 4 17 18 4 4 5 1 1 1 1	新 松 高 M M M M M M M M M M M M M M M M M M			
Scores	Boys F %	Girls F %		
1 - 2	9.04	ب		
3 - 4	17.08	11.92		
5 ~ 6	37.18	34.85		
7 - 0	28.64	23.85		
9 - 10	<b>ij</b> ,04	10.09		
	. What got the sent of 55 n.t. is. Jan 1-ba. In the last of dark produce what is proper well and governor many			

Comprehension of English Language scores for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



FREQUENCIES (%)

RELEVANT STATISTICS OF COMPREHENSION OF ENGLISH LANGUAGE
SCORES FOR BOYS AND GIRLS

Group	Mean	Median	Mode	SD	SK	kur
Boys	5.69	5.78	5.96	2.12	-0.127	0.256
Girls	5.51	5.57	5.70	2.29	-0.079	0.26*
	14 c 10 m m m m m m m m m m m m m m m m m m	na ma se )	ست يو ورست	· · · · · · · · · · · · · · · · · · ·	* * * *	

The comprehension of English Language scores are normally distributed for both boys and girls. Buth the distributions are negatively skewed, the distribution being slightly leptokuric for boys and platykuric for girls.

TABLE 4.14(-)

FIDUCIARY LIMITS OF MEAN & 5D OF COMPREHENSION OF ENGLISH
LANGUAGE GLORG FOR BOYS AND GIRLS

	velas v v	A P A P P M P M M P M M P M M P M M P M M P M M P M M P M M P M M P M M P M M M P M M M P M M P M M P M M P M M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P M P	
Group	SEM	.95	. 99
Boys	0.15	5.39 - 5.98	5.30 - ล.ยล
Girls	0.21	5.0A 5.94	4.95 - 6.08
	SC OF SD		
Boys	0.10	1.91 - 2.33	1.85 - 2.40
Girls	0.15	1.98 - 2.59	1.88 2.69

The .95 and .99 confidence limits for the Means and SDs of the Comprehension of English language scores for both boys and girls do not have very wide ranges. This implies that the sample statistics are dependable.

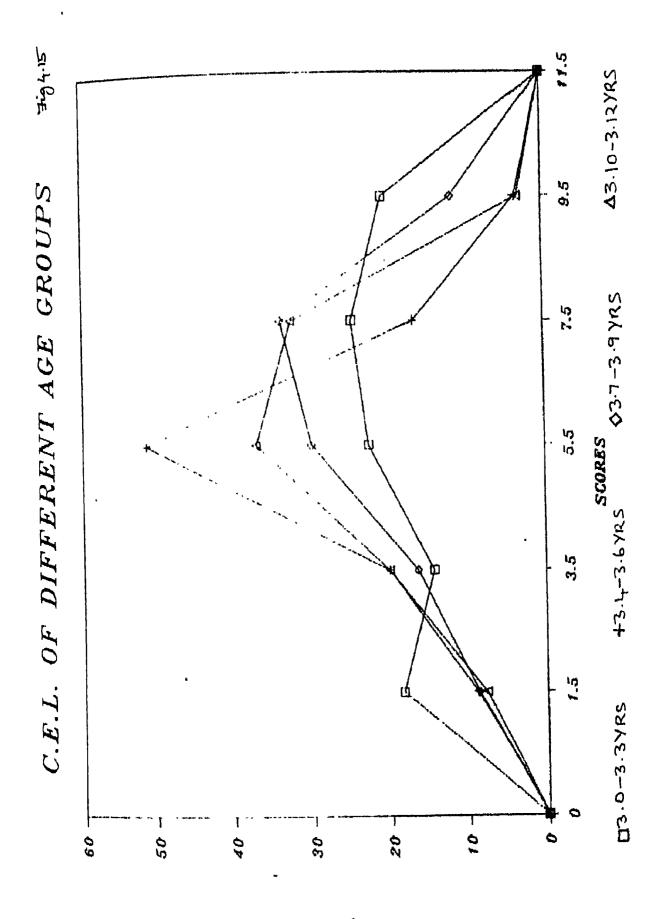
### COMPREHENSION OF ENGLISH LANGUAGE AND AGE

TABLE 4.15 (a)

# DISTRIBUTION OF COMPREHENSION OF ENGLISH LANGUAGE SCORES FOR THE DIFFERENT AGE GROUPS

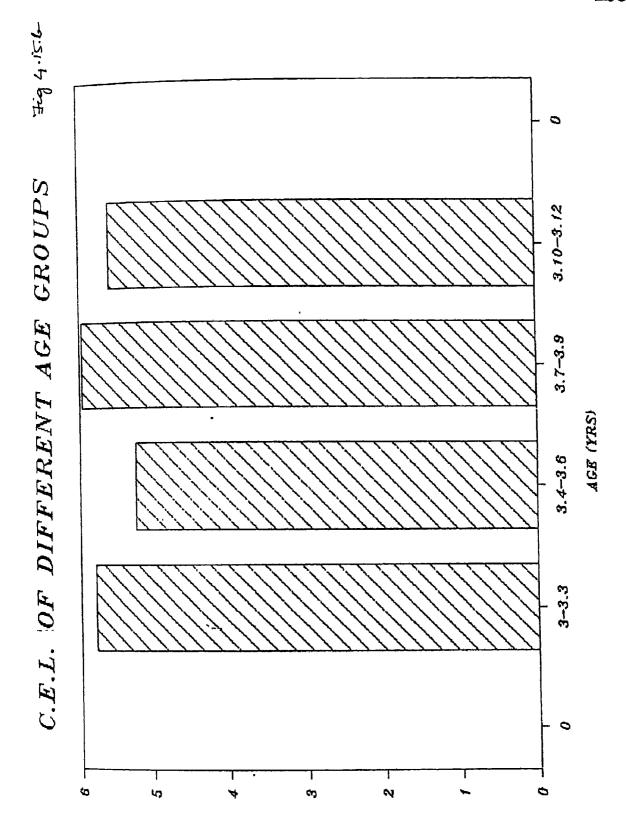
Scores		3 - 3.3 yrs. F %	yrs. yrs.		3.10 - 3.12 yrs F %	
	,	रक्षा प्रस्तान अर्थन स्थाप	ಗಿಜ್ಞಾನಗಿಕಾಗಿ ನೇ ತಿಜ್ಞಾನ್ ಒಂಬಿಂಬಿಗಿಗೆ ಪೆಗ್ರೆ ಒಬ್ಬರ ಬ್ಲ್ಯಾಪಿಸ್ತ ನಿಗ್ಗಿಗೆ ,	स्त्री अपने क्रम प्रस्तातालयः अस्त्री	agant dan adah adah sagar kan ang ang ang ang ang ang ang ang ang a	
1	- 2	10.36	9.99	8.65	7.69	
3	- 4	14.28	20.00	16.34	20,00	
5	- 6	22.44	51.11	29,80	30.92	
7	- 8	24.48	16.06	33.65	\$2.30	
9	- 10	20.40	3,33	11.53	4.0	

Figure 4.15 depicts the distribution of Comprehension of English language scores for different age groups in the form of Frequency polygons. The frequencies are plotted as percentages. Figure 4.15 (a) depicts the same in Bar Diagram. Bar Diagram of the Mean scores of the age groups are given in Figure 4.15 (b).



EBEGORNCIES (x)

LURGORNCIRE (X)



MEYN SCOKES

TABLE 4.15(b)

RELEVANT STATISTICS OF COMPREHENSION OF ENGLISH LANGUAGE

SCORES FOR THE DIFFERENT AGE GROUPS

Group Yrs.	Mean	Median	Mode	SD	SK	Kur
1. 3.00-3.03	5.78	604	a.56	2.77	~0.281	0.296
2. 3.04-3.06	5.21	5.32	5.55	1.82	-0.181	0.215
3. 3.07-3.09	5.96	6.17	6.60	2,24	-0.281	0.262
4. 3.10-3.12	5.56	570	6.00	1.95	-0.215	0.272
and were using your state with a seed that were stated with a both it	E1 10 10E NO 18F M	15	, . m.	* ** ** *** ** ** ** ** **	nt Mar ern um Militario Des um	~

The comprehension of English Language scores are almost normally distributed for the different age groups. All the four distributions are negatively skewed. Excepting group 2 and 3 which are leptokurtic in nature the remaining two groups are platy-furtic in nature.

FIDUCIARY LIMITS OF MEAN & SD OF COMPREHENSION OF ENGLISH
LANGUAGE SCORES FOR THE DIFFERENT AGE GROUPS

Group Yrs.	SEM	. 95	.99
1. 3.00-3.03	0,39	5.01 ~ 6.56	4.76 - 6.80
2. 3.04-3.06	0.19	4.83 - 5.58	4.71 - 5.70
3. 3.07-3.09	0.21	5.53 - 6.39	5.39 - 6.52
4. 3.10-3.12	0.24	5.08 - 6.03	4.93 - 6.18

TABLE 4.15 (c) - Contd.

pur					
(iroup	SE OF SD	-4 (NK NK 166 SE	. 95		
1, 3.00-3.03	0.28	2.21 - 3.32	2.04 - 3.49		
2. 3.04-3.06	0.13	1.55 - 2.09	1.47 - 2.18		
3. 3.07-3.09	0.19	1.93 - 2.54	1.83 - 2.64		
4. 3.10-3.12	0.1.	1.61 - 2.28	1.50 - 2.39		
·····································	44 B 1 F Y	e i ji ki sel mener	新 (E) 1		

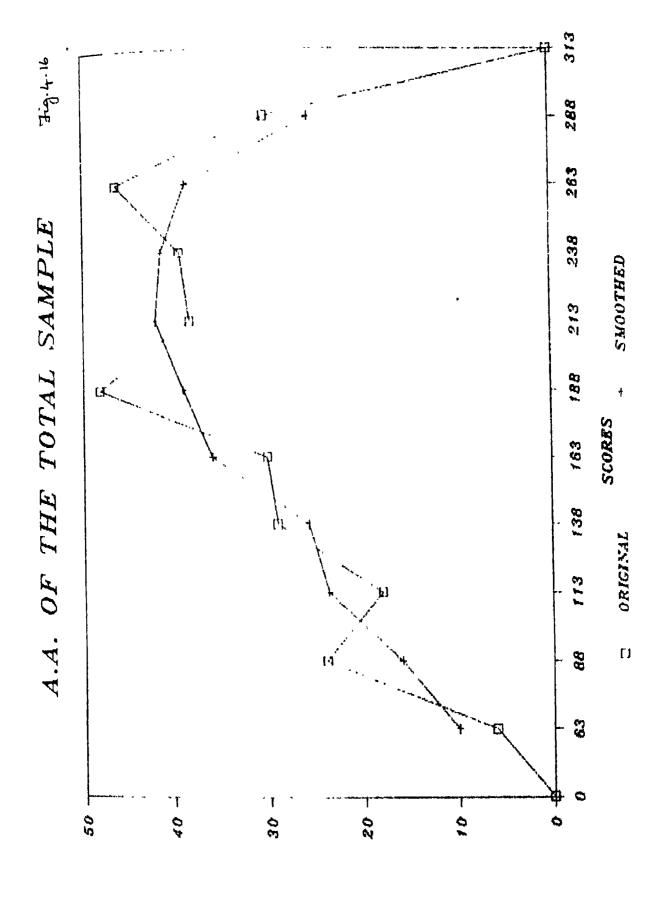
The Fide tiry limits of Means and SDs of English Language scores at .95 and .97 levels for the different age groups do not have very order ranges, thus indicating that the statistics are dependable of true measures.

#### ALCHERIC ACHREVEMENT

DISTRIBUTION OF ACADEMIC ACHIEVEMENT
SCORES FOR THE TOTAL SAMPLE

त्रात हैयां नोते हैं के पूर्ण क्षेत्र पूर्ण कीए प्रति पूर्ण कार्य हैं के पूर्ण के प्रति	and the second of the second o	and the other state and the title and and another state of the state of the state of
Scores	F ⁻	SMF
and the property design the state of the sta	Del en	
51 - 75	6	10.00
76 - 100	24	16.00
101 - 125	7.81	23.67
126 - 150	29	25.67
151 - 175	30	35.67
176 - 200	48	38.67
201 - 225	38	41.67
226 - 250	39	41.00
251 - 275	46	38.33
276 - 300	30	25.33
	ne have been been refer and been been	
TOTAL :	308	

Figure 4.16 gives the original and smoothed frequency polygons of Academic Achievement scores for the total sample.



FREGUENCIES

TABLE 4.16 (b)

### FOR THE TOTAL SAMPLE

	وتنج مثيبا چيال لقدي نائني ليپيه محم بيليان جيدو الل	جون جوال الوال الأول المناسبة والمناسبة والمناسبة والمناسبة والمناسبة والمناسبة والمناسبة والمناسبة والمناسبة	جمع فين بين سي بيس فين فيد من الله عبد ال			
N	Mean	Median	Mode	SD	SK	Kur
	ياوا والم المال	च्चेक प्रकार सेहार । हरू प्≒ान्तिया प्रवेश केरण व्यक्ति प्रहार				
308	196.60	199.98	206.73	61.99	-0.163	0.286
	عدد المال الم	. Diese alam gegg pjelle ausel warp morel or by 1 king jepti	the per rest title stat time som was ste san to			

The distribution of Academic Achievement scores among the total sample is near normal. The skewness of the distribution is negative and is platykurtic in nature.

TABLE 4.16 (c)

## FIDUCIARY LIMITS OF MEAN & SD OF ACADEMIC ACHIEVEMENT SCORES FOR THE TOTAL SAMPLES

يمان بابل هند بينو مان بابل مين مين مان فقد هند بينو مين	والمراورة والمراورة والمراورة والمراورة والمراورة والمراورة	المراجعة والمراجعة وا	
Statistic	SE	. 95	. 99
	مناه المناه المن	يد الجاء على الله حمد منه بها أخل الراء الراء عنه كما يدم ومن الله الله الله الله الله الله الله الل	والمراجع والمراجعة والمراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة والمراجعة
Mean	3.53	189.68 - 203.52	187.49 - 205.71
SD	2.50	57.07 ~ 66.90	55.51 - 68.45
والم المال والم المال ويات بيت ويال فول الدر بيت أنت الم		کے بھارہ مسالہ بھی جنہ بھی کہتا ہے۔	الله الله الله الله الله الله الله الله

The .95 and .99 confidence limits for the Means and SDs of Academic Achievement scores do not exhibit a very wide range. This supports the normality of the distribution.

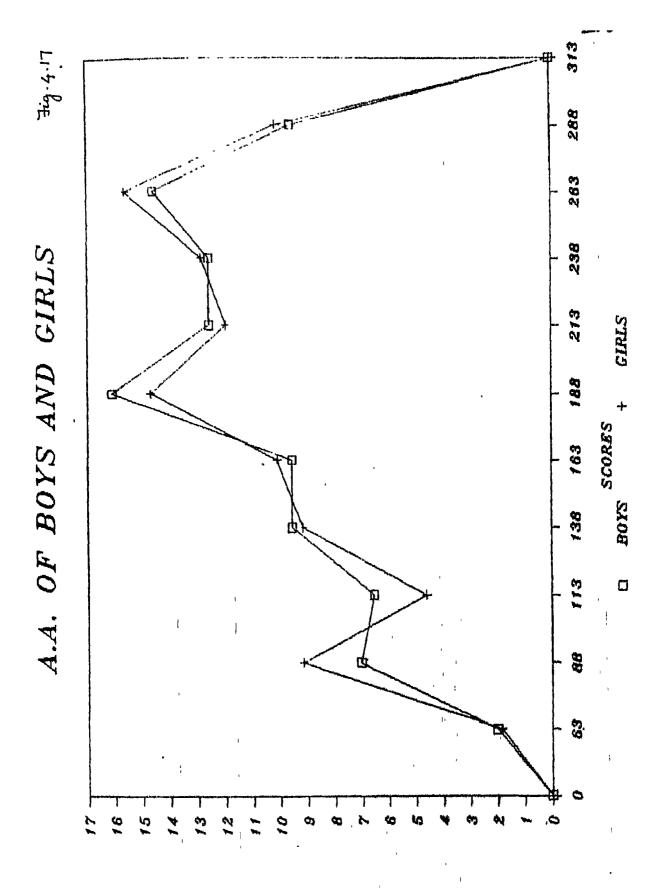
#### ACADEMIC ACHIEVEMENT AND SEX

TABLE 4.17 (a)

# FOR BOYS AND GIRLS

Scores	Boys F %	Girls F %
51 - 75	2.01	1.83
76 - 100	7.04	9.17
101 - 125	6.53	4.59
126 - 150	9.55	9.17
151 - <b>175</b>	9.55	10.09
176 - 200	16.08	14.68
201 - 225	12.56	11.93
226 - 250	12.56	12.84
251 - 275	14.57	15.60
276 - 300	9.55	10.09
		نام سا من جد جد بازد ها جد نوب السامية على هذا الله الما الما الما الما الما الما الم

Figure 4.17 depicts the distribution of Academic Achievement scores for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



EREGUENCIES (%)

TABLE 4.17 (b)

RELEVANT STATISTICS OF A.A. SCORES

FOR BOYS AND GIRLS

Group	Mean	Median	Mode	as	SK	Kur
Boys	196.29	199.33	205.40	61.50	-0.148	0.289
Girls	197.17	201.46	210.04	62.87	-0.205	0.282

The distribution of Academic Achievement scores among boys and girls for the total sample seems to be almost normal. The distributions are negatively skewed and are platykurtic in nature.

FIDUCIARY LIMITS OF M & SD OF A.A.

SCORES OF BOYS AND GIRLS

Group	. SEM	.95	.99
Boys	4.36	187.74 - 204.84	185.04 - 207.54
Girls	6.02	185.37 - 208.98	181.64 - 212.71
	SE of SD		
Boys	3.10	55.43 - 67.56	53.51 - 69.48
Girls	4.28	54.49 - 71.25	51.84 - 73.90

The .95 and .99 confidence intervals for the Means and SDs of both the groups are comparatively not very wide which indicates the high dependability of sample statistics.



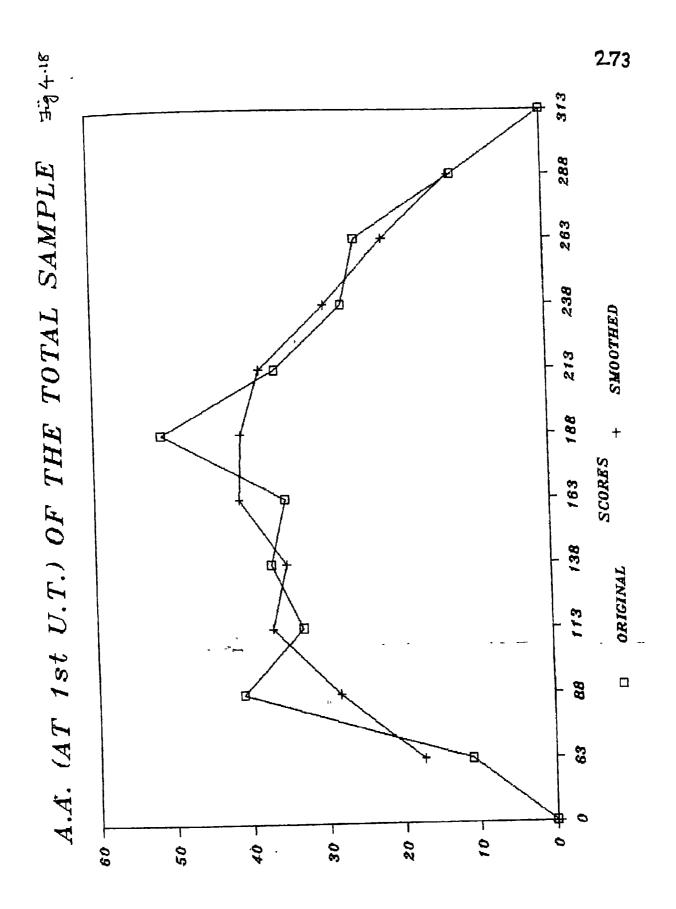
#### ACADEMIC ACHIEVEMENT IN FIRST UNIT TEST

DISTRIBUTION OF ACADEMIC ACHIEVEMENT SCORES OBTAINED IN FIRST
UNIT TEST FOR THE TOTAL SAMPLE

TABLE 4.18(a)

	يع سنة بين الما الما الما الما الما الما الما الم	## ## +# +# ## ## ## ## ## ## ## ## ## #
Scores		SMF
51 - 75	11	17.33
76 - 100	41	28.33
101 - 125	33	37.00
126 - 150	.37	35.00
151 - 175	.35	41.00
176 - 200	51	40.67
201 - 225	36	38.00
226 - 250	27	29.33
251 - 275	25	21.33
276 - 300	12	12.33
	المرابع منافع منافع منافع منافع منافع منافع منافع منافع	
	308	
ha falm spile, days, page galle ghot days about spipe takes bibet allow been been some spipe galle sa	بعد والله والل	

Figure 4.18 gives the original and smoothed frequency polygons of Academic Achievement scores obtained in the First Unit Test for the total sample.



**EREQUENCIES** 

TABLE 4.18(b)

### HELEVANT STATISTICS OF ACADEMIC ACHIEVEMENT SCORES OBTAINED IN FIRST UNIT TEST FOR THE TOTAL SAMPLE

,, <del></del>							
N	Mean	Median	Mode	SD	SK	Kur	
308	170.63	173.36	179.81	60.83	-0.134	0.286	
		a senser of the spenish new	e aljud is he med now make at mysta book asyr place		ion on the say sky		

The Academic Achievement scores in the First Unit Test for the total sample seems to be distributed normally. The Distribution is negatively skewed and is platykuric in nature.

TABLE 4.18 (c)

### FIRST UNIT TEST FOR THE TOTAL SAMPLE

The last was 100 feet 401 and 100 and 100 and 100 and							
Statistic	9.E.		. <del>9</del> 5			. 99	
a se this true year are now the large layer and the	म्ब इत्तास नामा प्राप्त पर्यो । स्त्रे केल्पि शिल्लाचर्यः । स्त्रः के	فلك بينه احج جيو جيه يينيد .يد يوه يو			<del></del>		
Mean	3.46	163.83		177.42	161.68	-	179.57
SD	2.46	56.00	-	65.65	54.47	_	67.17
요지 보는 것으로 가득 있었다. 것으로 나는 것으로 나는 것으로 나는 것으로 나는 것으로 나는 것으로 나는 것으로 보는 것으로 보고 않는 것으로 보는 것으로 보는 것으로 보고 않는 것으로 보고 않는 것으로 보고 있다.							

The .95 and .99 confidence limits for the Means and SDs of Academic Achievement scores in First Unit Test do not exhibit a very wide range. This supports the normality of the distribution and the significance of the sample statistics.

#### ACADEMIC ACHIEVEMENT AND SEX IN FIRST UNIT TEST

TABLE 4.19(a)

DISTRIBUTION OF A.A. SCORES OBTAINED IN FIRST UNIT

TEST FOR BOYS AND GIRLS

,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	ر يك جمع الله على الله الله الله الله الله الله الله ال	****
Scores	Boys F %	
وه وسود الدون الدون هذه حقيد بيون ولاية المثل الدون	وه و هما همه همه جمع به جوار برای بیش این کاری شده بدند مدر مدر بدن کار این سیره شده	
51 - 75	4.02	2.75
76 - 100	12.06	15.60
101 - 125	11.56	9,17
126 - 150	13,06	10.02
151 - 175	12.56	9.17
176 - 200	15.08	19.27
201 - 225	12.56	10.09
224 - 250	8.04	10.09
251 - 275	7.54	9.17
276 - 300	3.52	4.59
		* # = - = = = = = = = = = = = = = = = = =

Figure 4.19 depicts the distribution of Academic Achievement scores obtained in First Unit Test for boys, and girls in the form of frequency polygons. The frequencies are plotted as percentages.

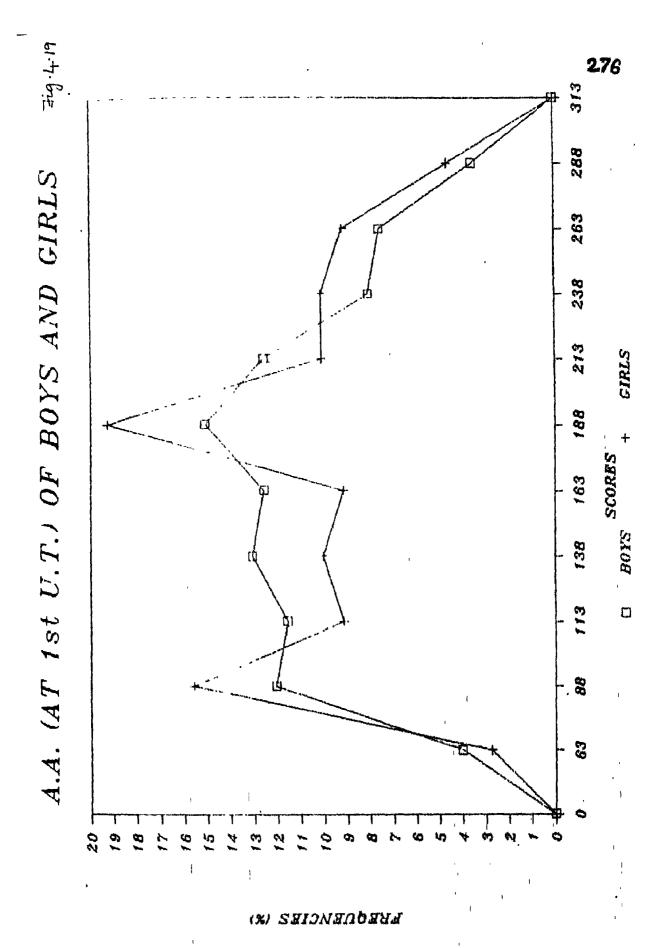


TABLE 4.19 (b)

RELEVANT STATISTICS OF A.A. SCORES OBTAINED IN FIRST

UNIT TEST FOR BOYS AND GIRLS

Group	Mean	Median	Mode	SD	SK	Kur
Boys	168.90	169.00	169.19	59.83	-0.005	0.283
Girls	173.78	179.67	191.44	62.48	-0.283	0.299

The Academic Achievement scores among Boys and Girls in the first Unit Test is distributed normally in the total sample. Both the distribution are negatively skewed and are platykurtic in nature.

FIDUCIARY LIMITS OF MEAN & SD OF A.A. SCORES OBTAINED IN
FIRST UNIT TEST FOR BOYS AND GIRLS

	والمدارية والمدارية والمدارية والمدارية والمدارية والمدارية والمدارية	منت خود منت بنت جنت جند بنية للبلة للبوا على ومن بنية عليه خود والله بنية والله بنية والله المنت الم	
Groups	SEM	. 95	.99
Boys	4.24	160.59 - 177.22	157.96 - 179.85
Girls	5.98	162.05 - 185.51	158.34 - 189.22
	SE of SD		
Boys	3.01	53.93 - 65.74	52.06 - 67.60
Girls	4.25	54.15 ~ 70.80	51.51 - 73.44

The . 95 and .99 confidence limits for the Means and SDs of both the groups do not exhibit very wide ranges thus indicating the high dependability of the sample statistics.

#### ACADEMIC ACHIEVEMENT IN FIRST SEMESTER EXAM

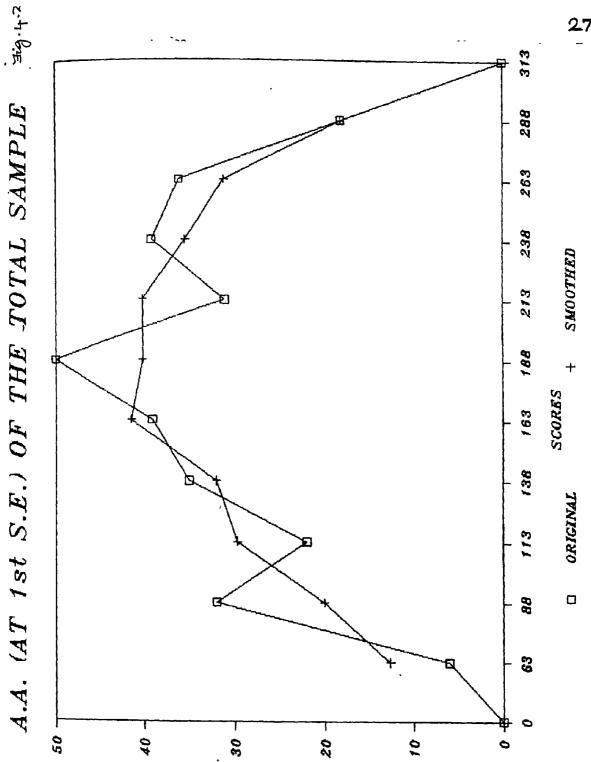
DISTRIBUTION OF A.A. SCORES OBTAINED IN FIRST SEMESTER

EXAM FUR THE TOTAL SAMPLE

Scores	F	SMF			
و عليا حجب بشم علي عليه حيث الآلة شعب دي جيء كالة الله جيء دي كي حيد بيها أنها بيدا	الله مثل بدور مي بيور بي ميد شم سات كل كان بيد	شد الله 100 مند ده چه غدر څوه دوي ليې بيد ودې يې بيان الله يده منه عله سند 			
51 - 75	٤٠	12.67			
76 - 100	32	20.00			
101 - 125	en, en, L. L.	29.67			
126 - 150	35	32.00			
151 - 175	39	41.33			
176 - 200	50	40.00			
201 - 225	31	40.00			
226 - 250	39	<b>35.</b> 33			
251 - 275	36	31.00			
276 - 300	15	18.00			
	spen while made pairs after shall with hills				
Total	308				

Figure 4.20 gives the original and smoothed frequency polygons of A.A. scores obtained in first semester exam for the total sample.





**EKEGUENCIE**S

TABLE 4.20 (b)

### RELEVANT STATISTICS OF A.A. SCORES OBTAINED IN FIRST SEMESTER CXAM FOR THE TOTAL SAMPLE

*** 1-0 FO ***							
N	Mean	Median	Mode	as	SK	Kur	
part term of							
308	184.43	185.5	187.64	60.96	-0.052	0.285	
		n jahih memahan manipilan kelalan menerakan di k				~ *	

The distribution of Academic Achievement scores for the total sample in First Semester exam is fairly normal. The skewness is negative and the distribution is platykurtic in nature.

TABLE 4.20 (c)

## FIRST SEMESTER EXAM FOR THE TOTAL SAMPLE

Statistic	S.E.	. 95	.99
الأستان مناه المناه الم	وجنب مرء يهي فلقت فجاب طيبية سيود كانة عطائه بالماد معيال	يهيم حصف علمي وقبص حصن وجين فبلو والبات عيون والبان ويابان نهاية والباء وينها عليان وبيان ويابان والبان	*** *** *** *** *** *** *** *** *** *** *** *** ***
Mean	3.47	177.61 - 191.23	175.46 - 193.39
SD	2.46	56.13 - 65.80	54.60 - 67.33

The .95 & .99 confidence limits for the Means and SDs of Academic Achievement scores in First Semester exam do not have very wide ranges thus implying the dependability of sample statistics as true measures.

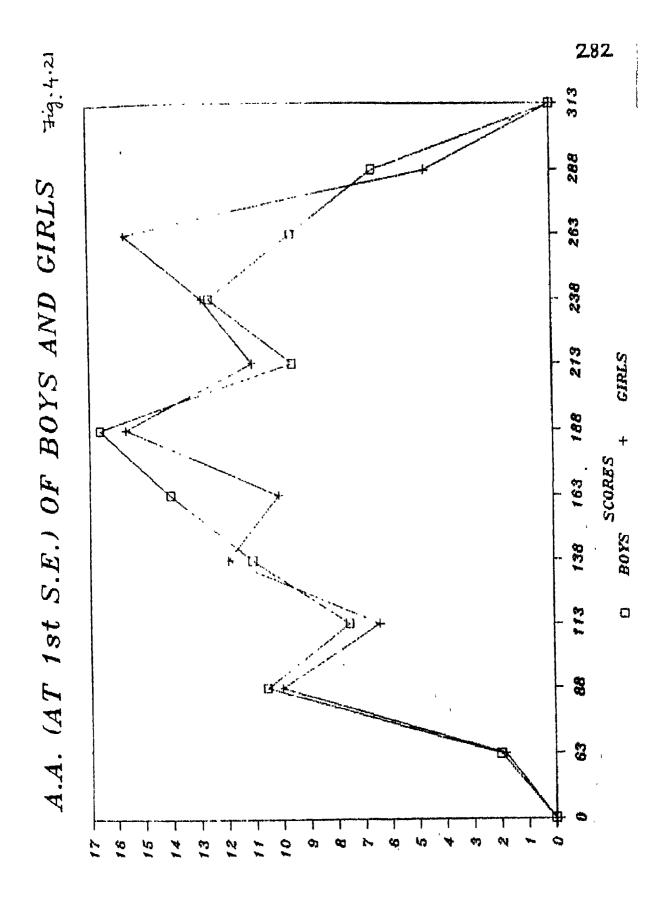
#### ACADEMIC ACHIEVEMENT IN FIRST SEMESTER EXAM AND SEX

TABLE 4.21(a)

DISTRIBUTION OF A.A. SCORES OBTAINED IN FIRST
SEMESTER EXAM FOR BOYS AND GIRLS

		من الله الله الله الله الله الله الله الل	
Score		Boys F %	
	- 75	2.01	1.83
76	- 100	10.55	10.02
101	·· 125	7.54	6.42
126	- 150	11.06	11.93
151	- 175	14.01	10.09
176	- 200	16.58	15.60
201	- 225	9.55	11.01
226	·- 250	12.56	12.84
251	- 275	9.55	15.60
	- 300	6.53	4.59
		12" (NOT 1800 ONE 520 MIN MIN MIT 2 11 1 F PRE ANY N 1 SEE TOP YOU MAN AND AND AND AND AND AND AND AND AND A	

Figure 4.21 depicts the distribution of Academic Achievement scores obtained in First Semester Exam for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



EREGUENCIES (%)

RELEVANT STATISTICS OF A.A. SCORES OBTAINED IN
FIRST SEMESTER EXAM FOR DOYS AND GIRLS

Group	Mean	Median	Mode	SD	SK	kur
little deg and man harm						
Boys	182.60	182.70	182.90	60.77	-0.004	0.280
Girls	187.77	190.94	197.28	61.19	~0.155	0.297
		سور سويم کاما يون بي در يو کاما راسه بياد سيد .	ين من بند وي الله الله الله الله الله الله الله الل	بيي پيم سه عده انجر ذبره صاه ست	~~~~~~	

The scores of Academic Achievement in First Semester exam of Boys and Girls seem to be distributed normally among the total sample. The skewness of the distribution is negative and both are platykurtic in nature.

FIDUCIARY LIMITS OF MEAN & SD OF A.A. SCORES OBTAINED IN
FIRST SEMESTER EXAM FOR BOYS AND GIRLS

511 Att 400 Sec 100 - 101 194 644 4		All have seen topic with the total and total total total total total and total and total total and total and t	
Group	SEM	. 95	.99
Boys	4.31	174.16 - 191.04	171.48 - 193.71
Girls	5.06	176.28 - 199.26	172.65 - 202.89
	SE of SD		
Boys	3.06	54.77 - 66.76	52.88 - 68.66
Giris	4.16	53.03 - 69.35	50.45 - 71.93

The .95 and .99 confidence limits for the Means and SDs for both the scores seem to be fairly narrow though for the girls the range is slightly wider compared to the boys.

### ACADEMIC ACHIEVEMENT IN SECOND UNIT TEST

DISTRIBUTION OF A.A. SCORES OBTAINED IN SECOND UNIT

TEST FOR THE TOTAL SAMPLE

Scor		SMF					
			والله الله والله الله الله والله وال				
51	edf	75	4	7.33			
76	-	100	18	11.66			
101	-	125	13	20.00			
126	-	150	29	21.00			
151	-	175	21	31.00			
176	***	200	43	33.00			
201	-	225	37	41.33			
226		250	44	45.00			
251	-	275	54	47.67			
276	-	300	45	33.00			
			stag days talle jam allet taulk days data				
TOTA	L		308				
-WE days with 1874-							

Figure 4.22 gives the original and smoothed frequency polygons of A.A. scores obtained in second unit Test for the total sample.

**EBEGUENCIES** 

) %

TABLE 4.22 (b)

### RELEVANT STATISTICS OF A.A. SCORES OBTAINED IN SECOND UNIT TEST FOR THE TOTAL SAMPLE

	ومن عميد شده بيشتر يسيد شدن ولين ميد ميد البراء ميد						
N	Mean	Median	Mode	SD	sĸ	Kur	
	ن به این						
308	208.86	218.06	236.48	61.21	-0.451	0.285	
大學 銀 日本 中華 一 本 一 本 一 本 一 本 一 本 一 本 一 本 一 本 一 本 一							

The scores of Academic Achievement in Second Unit Test for the total sample is distributed fairly normally. The skewness is negative and is platykurtic in nature.

TABLE 4.22 (c)

### UNIT IEST FOR THE TOTAL SAMPLE

Statistic	SE	.95	. 77
The thee tid is well as led is 3 map lime to a	to the second section of the section of the second section of the	and the second s	100 8/ 917 05
Mean	3.48	202.02 ~ 215.69	199.86 - 217.85
SD	2.47	56.35 - 66.06	54.82 - 67.60

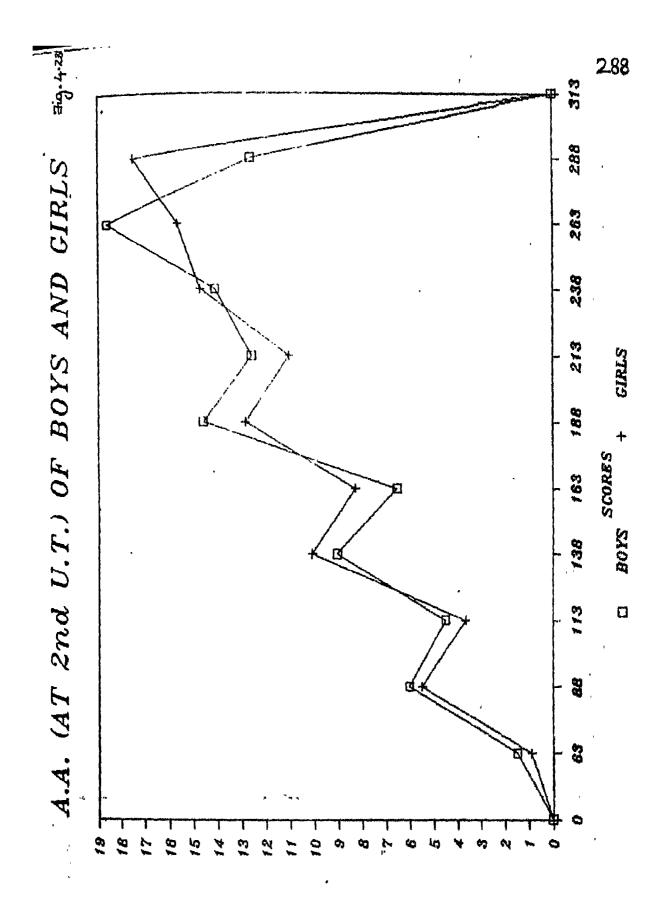
The .95 and .99 confidence limits for the Means and SDs of Academic Achievement scores in Second Unit Test have very narrow ranges. This implies the dependability of sample statistics as true measures.

#### ACADEMIC ACHIEVEMENT AND SEX IN SECOND UNIT TEST

DISTRIBUTION OF A.A. SCORES OBTAINED IN SECOND
UNIT TEST FOR BOYS AND GIRLS

شعار مخاط حيور وحاد وه								
Score			Doys f %	Girls F X				
	PM	Por stud Dift, retty med Uni	ayes this tigg tape of the season of a table to the season of the season					
51	alba	75	1.31	0.92				
76	-	100	6.03	5.50				
101	•	125	4.52	3.67				
126	777	150	9.05	10.09				
151		17%	6.53	8,26				
176	+	200	14.07	12.84				
201		225	12.54	11.01				
226		250	(8.07	14.68				
251		275	18.59	15.60				
276		300	12.56	17.43				
				والمنافذة المنافذة ال				

Figure 4.23 depicts the distribution of Academic Achievement scores obtained in Second Unit Test for Boys and Girls in the form of frequency polygons. The frequencies are plotted as percentages.



EBEGRENCIES (X)

TABLE 4.23 (b)

RELEVANT STATISTICS OF A.A. SCORES OBTAINED IN SECOND

UNIT TEST FOR BOYS AND GIRLS

والم مراه منها الحد الماء الماء عنه أميم جاء		7 70 VI 40 UI - 40 44 85 45				
Graup <b>s</b>	Mean	Median	Made	SD	SK	Kur
والمرا المال المال والمرا ومن حيث منها المال المال	ه انت بین ملک نازه نیو بین آنه بی و	ي جود مرب سيد وي ادم است داك بلات هذه	نوم دکو احظ داند کال بروه دی میں منظ جاہد		***************************************	
Boys	207.22	216.00	233.56	61.01	-0.432	0.280
Girls	210.71	220.29	239.46	61,19	-0.470	0.305
		سر ميا منظ فجد علد بازة سنة عدد چري سنې				

The A.A. scores in second unit test for both scores seems to be distributed normally. Both are negatively skewed and are platykurtic in nature.

FIDUCIARY LIMITS OF M & SD OF A.A. SCORES OBTAINED IN
SECOND UNIT TEST FOR BOYS AND GIRLS

مان جنب مينا ليبا الدو جنبا منت دري باد	ه جين مين مي سي هند وقد حته جين سن بالان شن بيد	ا يونان درين ماند الله حين ويون دون دون ويون فيون دون دون دون دون دون دون دون دون دون د	arth, enan ainte fhith dhar saoil, saith agus Suin, bhai aidh anns anns ainn dhife dh'in, ainn ainte luith
Groups	SEM	. 75	.99
Boys	4.33	198.74 - 215.70	196.06 - 218.38
Girls	5.86	199.22 - 222.19	195.58 - 225.83
	SE of SD		
Boys	3.07	54.99 - 67.03	53.09 - 68.94
Girls	4.16	53.04 - 69.35	50.46 - 71.93
done your explicit parts for freeho extent hand the			

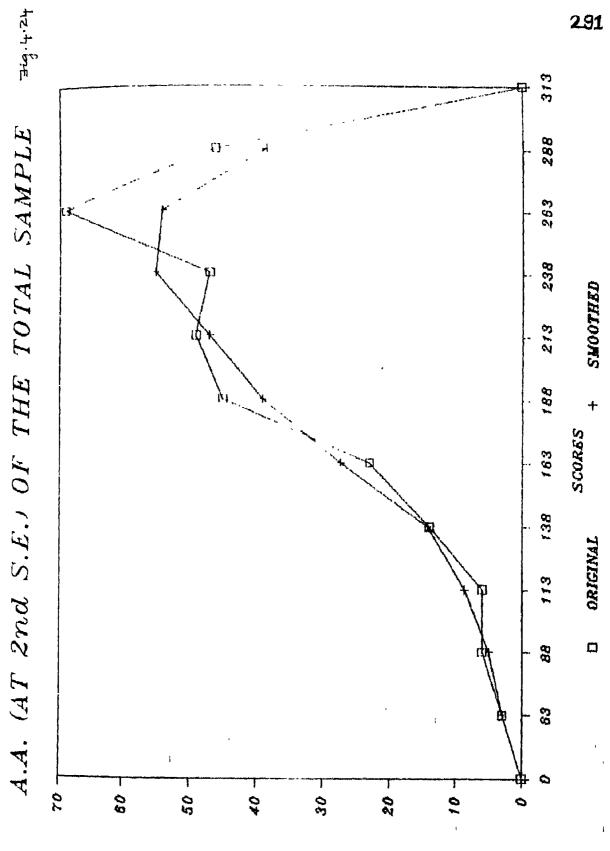
The "95 and .99 confidence limits for the Means and SDs of boys and girls are comparatively narrow which indicates the dependability of sample statistics.

#### ACADEMIC ACHIEVEMENT IN SECOND SEMESTER EXAM

DISTRIBUTION OF A.A. SCORES OBTAINED IN SECOND
SEMESTER EXAM FOR THE TOTAL SAMPLE

ه هوی خصد جید بستی	大型 大						
Scores			F	SMF			
	سه ښه وي	ه نظام ویک جنگ کا کا ایک ایک ایک کا	and the second s	والله والأول والأو والإو والله الله الله الله والله والله والله والله والله والله الله			
51	_	75	3	3.00			
76	r <del>-</del>	100	6	5.00			
101		125	5	9.67			
126	-	150	14	14.33			
151		175	23	27.33			
176	нь	200	45	39.00			
201		225	47	47.00			
226		250	47	55.00			
251		275	69	54.00			
276	#1	300	46	38.33			
			واحدوا فالما مقط محيد وابلا ملتي الموسر				
FOTA	<b>\</b> !		308				

Figure 4.24 gives the original and smoothed frequency polygons of A.A. scores obtained in Second Semester exam for the total sample.



**SHIONBUDARY** 

TABLE 4.24 (b)

### RELEVANT STATISTICS OF A.A. SCORES OBTAINED IN SECOND SEMESTER EXAM FOR THE TOTAL SAMPLE

و همه ينه سر حد	· · · · · · · · · · · · · · · · · · ·							
И	Mean	Median	Mode	SD	SK	Kur		
	مينه ميد ميد ميد دن، دب پخد ادر دو							
308	222.57	229.75	244.11	51.53	-0.418	0.285		
本本 大学								

The distribution of Academic Achievement scores for the total sample in Second Semester Exam is almost normal. The distribution is negatively skewed and is platykurtic in nature.

TABLE 4.24 (c)

### SECOND SEMESTER EXAM FOR THE TOTAL SAMPLE

N 444 (94) (4 4 12 4 12 4 12 4 1	** **		M 90 -41   1,254   M PE AT A	and that the part will had the term with that they that the last oper part with him to a
Statistic	SE		.95	. 99
	ine 1990 a. anada de deserve de _{de} sent d	ada fyr - ywng frw wirk hydy regy mwd	ک ڈکٹ بات سے فارچ بفتہ بھی ہے؟ اوپ اب	به حالت ميد ويو البيار
Mean	2.93	216.92	- 228.33	215.00 - 230.15
SD	2.08	47.44	- 55.62	46.15 ~ 56.91
the first time the time have been been been seen with	allyd Wess Chin with yold I have shore while some Manus Stells. II	الله البرا بدو آبان فاه هند میں اس		ري الله الله الله الله الله الله الله الل

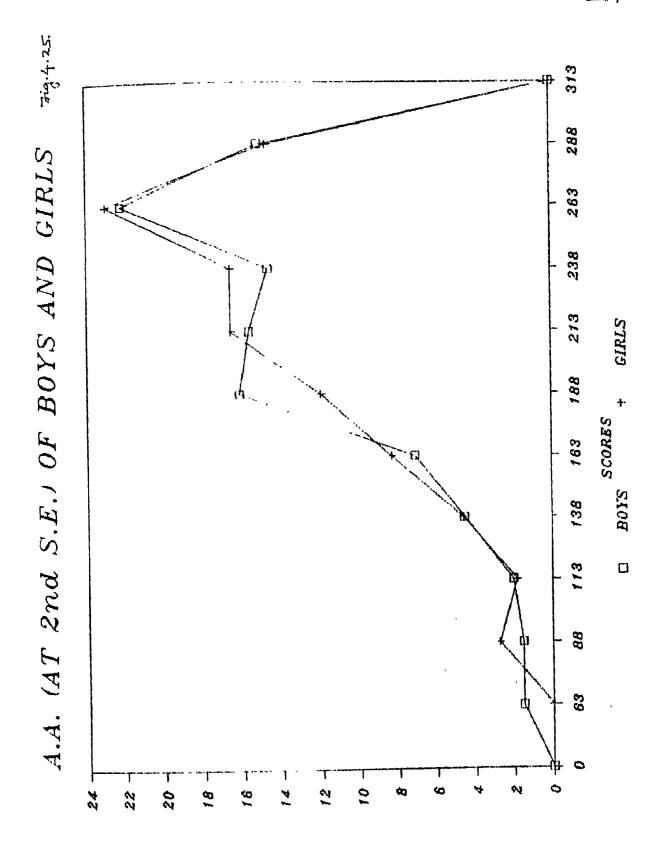
The .95 and .99 confidence limits for the Means and SDs of Academic Achievement scores in Second Semester Exam have narrow ranges implying the dependability of the sample statistics.

#### ACADEMIC ACHIEVEMENT AND SEX IN SECOND SEMESTER EXAM

DISTRIBUTION OF A.A. SCHRES OBTAINED IN SECOND SEMESTER EXAMED TO BOYS AND LIBES IN PERCENT FREQUENCIES

Actes in the Galler (Shine	The state of the s					
Scor	<b>e</b> 5		Boys F W	Girls F %		
., •		में प्रश्नात सम्बद्धालयों के	Wide to the control of all and appearable is all section to a	- के देखी राज्य प्रकृत करना स्थान सोवेंग करके पेतृत प्रकृत करना प्रकृत सेवेंग करके पूर्वत पूर्वत करना करना जा		
51		75	1.51	o		
76	4I	100	1.51	2.75		
101	**	125	2.01	1.83		
126	<u>.</u>	150	4.52	4.59		
151		175	7.04	8.26		
176	-	200	16.08	11.93		
201	•	225	15.58	16.51		
224	•	250	14.57	16.51		
251	-	275	22.11	22.94		
276	-	300	15.08	14.68		

Figure 4.25 depicts the distribution of A.A. scores obtained in Second Semester Exam for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



EBEGORNCIES (x)

TABLE 4.25 (b)

RELEVANT STATISTICS OF A.A. SCORES OBTAINED IN SECOND

SEMESTER FXAM FOR BOYS AND GIRLS

mand games posted and strong profit species from Fight Tolking Sec		mager taleng in, pilot- in de dang state talen in	1000 to 10 t		ومن بلاد هذا عمل جدا لاي ما دعا	
Broups	Mean	Median	Mode	SD	SK	Kur
الرام الله الله الله الله الله الله الله ال		THE DISC TIME I AND THE BUILD HAVE MADE AND THE A	ling day shift days had the dall this state days	خود هما والله عليه جود حدد عدد عدد		
Boys	221.92	229.52	241.71	52.14	-0.380	0.287
Girls	223.78	251.75	247.69	50.38	-0.475	0.279
		. Part and the first them to be a second				

The distribution of Academic Achievement scores among boys and girls are almost normal. Both have negative skewness and their variability too are comparable, and both are also platykurtic.

TABLE 4.25 (c)

FIDUCIARY LIMITS OF MEAN & SD OF A.A. SCORES OBTAINED IN

SECOND SEMESTER EXAM FOR BOYS AND GIRLS

49 100 40 40 40 40 40 40 40 40 40 40 40 40 4					
Groups	SEM	. 95	. 99		
Boys	3.70	214.67 - 229.16	212.38 - 231.46		
Girls	4.83	214.32 - 233.24	211.33 - 236.23		
	SE of SD				
Boys	2.62	47.10 - 57.29	45.37 - 58.91		
Girls	3.43	43.67 - 57.10	41.54 - 59.22		

The .95 and .99 confidence limits for both the sexes in Second Semester Exam have fairly narrow ranges.

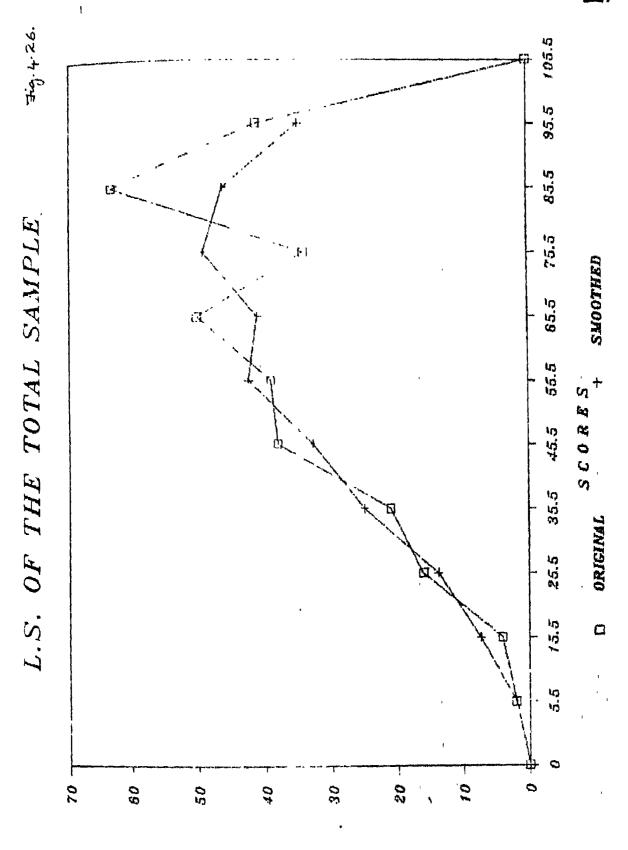
#### LANGUAGE

TABLE 4.26 (a)

## FOR THE TOTAL SAMPLE

play and group until a special right, which replies and filters are about them which the	14. The first the set that yet one who the first win the set of th	جنگ جنیات کنون آنون باشد و بدر و برای دوران انون جاری جنی باش بازد بازد بازد بازد بازد بازد در دارد در دارد در					
Scares	F	SMF					
त्रक्त क्यों क्योंक काला वरण्य अर्थक के प्रश्नेस्क स्थान केवाओं हुए । कर्नन क्या प्रश्ने अपना प्रश्ने	, of y \ yell as = 6. The = 6 of 1000, beh. It solft help room while following will along and date from the sing	ا من الله الله الله الله الله الله الله الل					
1 - 10	2	2.00					
11 - 20	4	7.33					
21 - 30	16	13.67					
31 - 40	21	25.00					
41 50	B	32.67					
51 - 60	39	42.33					
61 - 70	50	41.00					
71 - 80	34	49.00					
81 - 90	63	46.00					
91 - 100	41	34.67					
	and has some from their party stars from their party.						
Total	308						
是一种,我们是一种,我们就是一种,我们是一种,我们是一种,我们是一种,我们是一种,我们是一种,我们是一种,我们是一种,我们是一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种,我们就会一种							

Figure 4.26 gives the original and smoothed frequency polygons of language scores for the total sample.



**EBRONENCIES** 

TABLE 4.26 (6)

### RELEVANT STATISTICS OF LANGUAGE SCORES FOR THE TOTAL SAMPLE

ے بنے سے بنے	* C1	وهو هايك بدون وهود حوي خواه مسام مهيي ويول اللهاء .	منيه دوم ويود جون هيي ويود الود الود الود الود الود			
N	Mean	Median	Mode	SD	SK	Kur
				- 45° get ggg fiés min spy get syk syk sik m		
308	65.79	67.3	70.31	21.79	-0.207	0.303
		, 0,00 ten 1500 gall and 1 and 1 and 1 and 1	ages and the principles of her her may make with			

The distribution of language scores among the total sample of children is near normal. The skewness of the distribution is negative and is platykurtic in nature.

TABLE 4.26 (c)

### FIDUCIARY LIMITS OF MEAN & SD OF LANGUAGE SCORES FOR THE TOTAL SAMPLE

ن عالية فرقة وغول ملك شدر ولين وين المرة الداء المال المال المال المال المال	hill fill your term fact the tops and that you has did	به داده کاله کاله کاره داده داده میاه غیره دوره کار باید دوره کار خاند میره بیده کاره می مین بیدو کار ک	
Statistic	38	. 95	.99
소선 역의 수는 병에 있는 그를 보고 있는 것이 있다. 그는 것이 있는 것이 없다.	والمراجعة	يعد المراجعة والمراجعة المراجعة	به جود جود خود جود ماه جود جود جود جود جود جود جود خود خود خود خود خود خود خود خود خود خ
Mean	1.24	63.35 - 68.22	62.58 - 68.99
SD	0.88	20.06 - 23.52	19.51 - 24.06
و عليها نيم فيزه جلكه علمة عدة لعبل الجن الجن يتاك عمل الك	کار کیاں بیٹس بیٹی کیاں جان ہونہ چوا ہوگا یہ د کارہ ج	ه حجر وين بيش جد جد بسر من وي چود كن خرن بيش جد بيش بيش بيش بيش وي بيش بيش وي بيش خود د	سنة الله على الله الله الله الله الله الله الله على الله على الله على الله الله الله الله الله الله

The .75 and .99 fiduciary intervals of means and SDs of language scores for the total sample do not vary broadly in their ranges, denoting that the sample statistics are almost dependable.

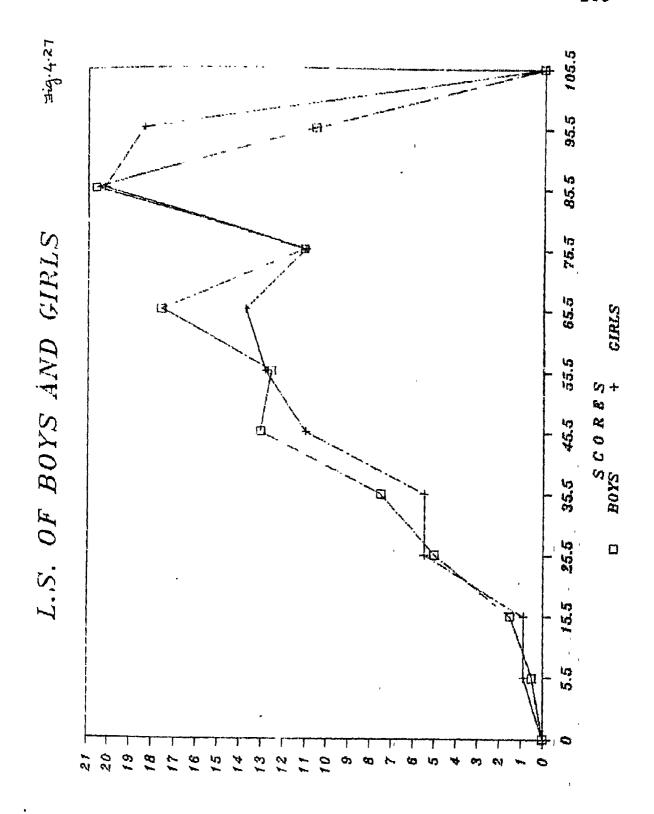
#### LANGUAGE AND SEX

TABLE 4.27 (a)

# DISTRIBUTION OF LANGUAGE SCORES FOR BOYS AND GIRLS IN PERCENT FREQUENCIES

,	, ₂₀₀ 240 740		وعلوا وبد المواهدة بله فيد فيد فيد الدواكة المارية الكان من سايا الله عبر سنة الله فيد منه وي بالدواكة الله من	ور المنا
Scc	)res		Boys F %	Girls F %
1	-	io	0.50	0.90
11	-	20	1.50	0.90
21		30	5.02	5.50
31	-	40	7.53	5.50
41	*	50	13.06	11.00
51	وكستو	60	12.56	12.84
61		70	17.59	13.76
71	-	80	11.05	11.00
81		90	20.60	20.19
91		100	10.55	18.34

Figure 4.27 depicts the distribution of Language Scores for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



FREQUENCIES %

TABLE 4.27(b)

RELEVANT STATISTICS OF SEX-WISE DISTRIBUTION OF LANGUAGE

SCORES FOR BOYS AND GIRLS

						M 44 M 14 47 47 48
Groups	Mean	Median	Mode	SD	SK	Kur
Boys	64.69	66.07	69.82	21.36	-0.193	0.309
Girls	67.79	70.16	74.91	22.40	-0.317	0.299
	نام خان سے بائم نہیہ بیس بنے ہے۔	با بات دی دید اشد فرد چین فکر بیان سی بیس ،	و سون دوان شون جون و ۱۸ دون کان دون د			

The distribution of language scores among the boys and girls are almost normally distributed. Both the distributions are negatively skewed and are platykurtic in nature.

FIDUCIARY LIMITS OF M & SD OF LANGUAGE
SCORES FOR BOYS AND GIRLS

Aur pu (An pagential rent All Mer 27 to 18 7		THE PARTY NAME AND ADDRESS OF THE PA					
(iroup	SE.M	aus to, de south head the . Forth date their solls	•	95		.99	- · · · · · · · · · · · · · · · · · · ·
lioys	1.51	41.72		67.66	60.7B		68.60
Girls	2.14	63.58	-	72.00	62.25	***	73.33
	SF of SD						
Boys	1.07	19.26	-	23.47	18.59	-	24.14
Girls	1.52	19.47	-	25.39	18.47	_	26.33

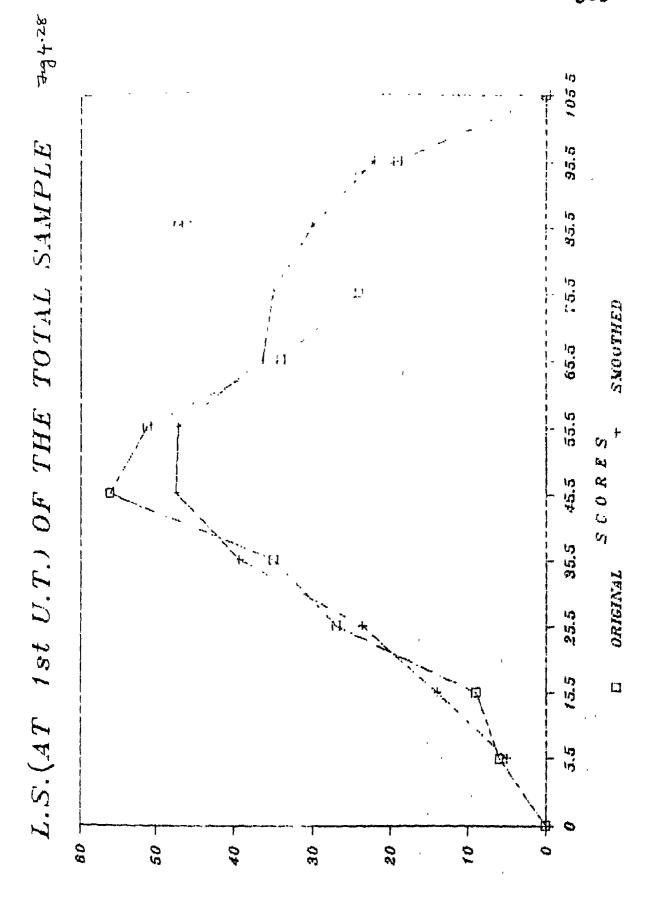
The .95 and .99 confidence limits of Means and SDs of language scores for boys and girls have fairly narrow ranges, thus implying that the sample statistics are almost dependable.

#### LANGUAGE IN FIRST UNIT TEST

DISTRIBUTION OF LANGUAGE SCORES OBTAINED IN FIRST UNIT

			and the last card had not may only have you by the second to the - 4 one ship it		
Sco	res	5	F	SMF	
** ** **	«		rung philopop dur to province to the province de engrepse.	er i gam and yet err - in stat ett fam and err salt err salt err yet fam fam fam fam til side salt sa	t gant figur -/ga tipe bible -con tipe tipe i
1	سي	10	6	5.00	
11	*1*	20	¥	14.00	
21		30	27	23.67	
31		40	35	39.33	
41		50	56	47.33	
31	-	60	51	47.00	
61	_	70	34	36.33	
71	~	80	24	75.00	
01	~	90	47	30.00	
41	-	100	19	22.00	
			V to the course and place has been deed at the most		
Tot	al		308		
***			ari wa 1882a marajana iliang kalana ana kija ki A Mahai Mahai pang apag Shi wa 1992 mpan wanti king mpi	الله على الله الله على الله الله الله الله الله الله الله ال	an they at he have your

Figure 4.28 gives the original and smoothed frequency polygons of language scores obtained in first unit test for the total sample.



1ARU" 4.28 (b)

RELEVANT STATISTICS OF LANGUAGE SCORES OBTAINED IN EIRST UNIT TEST LOR THE TOTAL SAMPLE

*** = ** **	و وي	कुरता विद्या प्रश्नेत होती है कि अपने हैं कि	والم المداد المداد المالية والماد المداد المداد المداد المداد			
N	Mean	Median	Mode	SD	SK	kur
	हर क्षेत्र कृष्टिल्ला क्षात्र केल क्षा		149 W. AR. 78 . 1 32 EM TO THE &			
308	56.34	54.61	51.16	22.70	0.228	0.287
	Annual or or states the		mr 140 m 4 m 4 m 4 m 140 m	,		

The distribution of language scores for the total sample in first unit test is normally distributed with a slight variability. The curve of the distribution is positively skewed and is platykurtic in nature.

TABLE 4.28 (c)

### IN FIRST UNIT TEST FOR THE TOTAL SAMPLE

		t of Clinic 2. ) and his major things on many through the pool to the free man and dery man had be	
Statistic	SE	. 95	.99
gair nam maga anggi. Ung Jako dayar daya, ake gunda d Sr i	gar 4 m s saga badh ma' vena eann sa	و الله الله الله الله الله الله الله الل	may make pagga pagan andar pagar palan, seran yan sahibi ser samah ser Main ma, berga
Mean	1.29	53.80 - 58.87	53.00 - 59.68
SD	0.91	20.90 - 24.50	20.33 - 25.07
		مين جين جين جين الهن مان مين الهن مين علي مينه وال الهن الهن الهن الهن مين مان هيا والهن الهن الهن	

The .95 and .99 confidence limits for the Means and SDs of Language scores in first unit test do not vary widely. This indicates a fairly high degree of significance of the sample statistics.

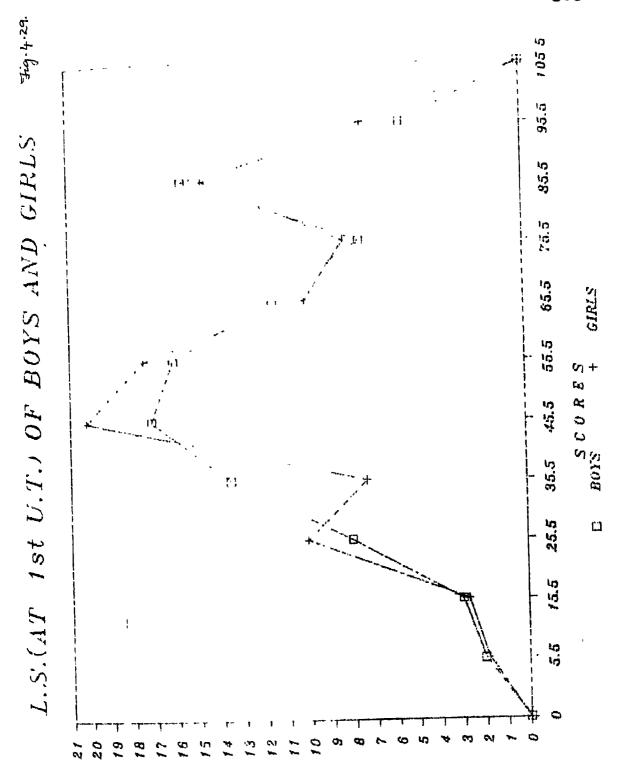
### LANGIJACH HAD BEX IN FIRST UNIT TEST

TABLE 4.29 (a)

DISTRIBUTION DE LANGUAGE SCORES OBTAINED IN FIRST UNIT TEST EOR DOYS AND GIRLS IN PERCENT FREQUENCIES

- 0.0	Boys F %	Girls F 3
ores	and the late to the property of the same party of the	was the constitute and the constitute that the constitute of the constitute that the
보는 무슨 없는 수는 모두 없는 것은 없는 것은 식물 없는 모수 보는 것도 있다.	90 P 10 P	. 37
- 10	2.01	1.83
ma ed	3,01	2.75
_ 20	13.04	10.09
- 30	0.04	י די די
ı - 40	13.56	7.33
	17.08	20.18
-	16.08	17.43
1 - 60	In a con-	10.09
1 - 70	11.55	10.00
1 - 80	7.53	8.25
-	15.57	14.67
1 - 90		1, 53
1 - 100	5.52	, 1,1

Figure 4.29 depicts the distribution of language scores obtained in first unit test for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



EBEGNENCIES #

RELEVANT STATISTICS OF LANGUAGE SCORES OBTAINED IN FIRST
UNIT 15-1 10H BOYS AND GIRLS

ه اهل خود عمد حدد الله الله عند الله من	من من من من من من من من من	a ing a sa partendana eta eta e	gar ann fil on ta Shin dydy barn and gade hyde w			. 4-24
Groups	Mean	Median	Mode	SD	SK	kur
Boys	56.00	54.40	51.21	22.63	0.212	0.295
Girls	56.96	54.97	50.98	22.82	0.262	0.277

The distributions of language scores among boys and girls in first Unit Test are almost normal with equal degree of variability. The distributions are positively skewed and are platykurfic.

FIDUCIARY LIMITS OF MEAN & SD OF LANGUAGE SCORES OBTAINED IN
FIRST UNLI TEST FOR BOYS AND GIRLS

Group	SEM			. 95			. <del>.</del>
Boys	1.60	52.85	-	59.14	51.86		60.14
Girls	2.18	52.68	<b></b>	61.25	51.32	-	62.60
	SE of SD						
Boys	1.13	20.40	•	24.06	19.69		75 °5 ,
Girls	1.55	19.77	a plan	25.86	18.81	-	26.82

From the entries in table 4.29(c) it is clear that language scores for boys and girls in First Unit Test are almost normally distributed in the sample. The .95 and .99 confidence limits for language scores in first unit test do not differ widely in their ranges implying the high degree of significance of statistics.

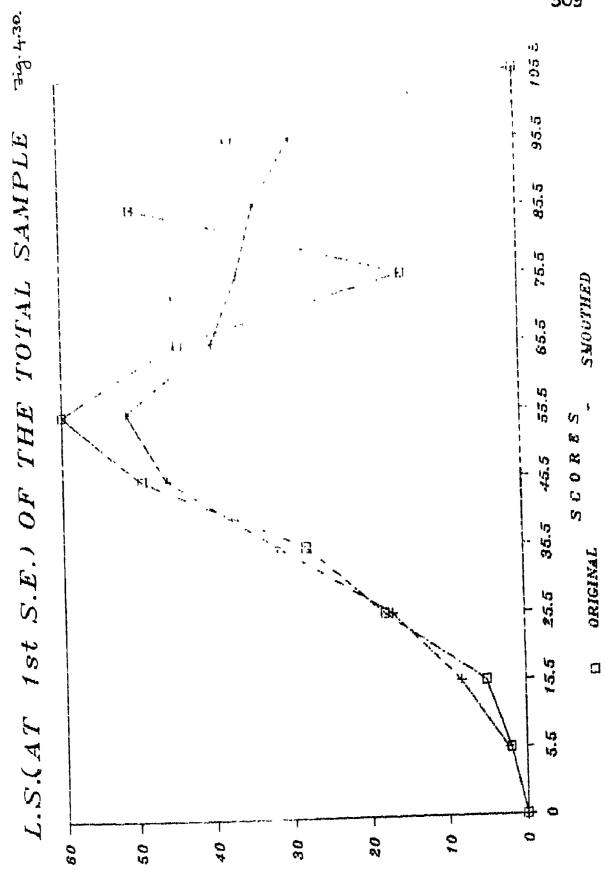
### LANGUAGE IN FIRST SEMESTER EXAM

TABLE 4.30 (a)

# DISTRIBUTION OF LANGUAGE SCORES OBTAINED IN FIRST SEMESTER EXAM FOR THE TOTAL SAMPLE

			والمرافقة والمرافقة والمرافقة والمرافقة المرافقة والمرافقة والمراف	. ما يون الله الله الله مياه الله الله الله ويون الله الله الله الله الله الله الله الل
Sco	res		, <b>F</b>	SMF
			i Naga Baby pami mana fisar apida sari sapi Jan 1941, sari A.57 sari sari 1961 P.A. sari . sani kapar 196 pamb sani sani sani sani sani sani sani sani	
1	_	10	2	2.33
11		20	5	8.33
21		20	18	17.00
31	-	40	28	31.67
41	_	50	49	45.67
51		60	60	51.00
61	-	70	44	39.67
71		80	15	36.33
91	-	90	50	34.00
91	well	100	37	29.00
			্যাল ১৮ সিল্ল ক্ৰমাৰ কৰিব আছেল চলত চৰকী বকুৰী বিজয়া	
	TC	TAL	308	

Figure 4.30 gives the original and smoothed frequency polygons of Language scores obtained in first Semester Exam for the total sample.



RELEVANT STALISTICS OF LANGUAGE SCORES OBTAINED IN FIRST SEMESTER EXAM FOR THE TOTAL SAMPLE

, see		A Marie of the Control of the Contro	to I i the ent that the ent does to			
N	Mean	Median	Mode	SD	sĸ	Kur
مية زيت جن جن وب			a and the species and the least to a section of			
Bot	61.44	59.16	54.61	21.99	0.316	0.311
		paramentary menter of the state	r ing paga pagan sama agan basa mala dan s			

The distribution of language scores for the total sample in first demester exam is normally distributed with a slight variability. The curve of the distribution is positively skewed and platykurtic in nature.

FIDUCIARY LIMITS OF MEAN & SD OF LANGUAGE SCORES OBTAINED IN
FIRST SEMESTER EXAM FOR THE TOTAL SAMPLE

e به چاپ ازه طلب ۱۹۵۰ وزی ترین ۱۹۵۰ منت سند سیة شب	the tax are the three and the tax and the total in	May have done of the same and the tree to				~		
Statistic	SE			.95	•	99		
عادة سود جسم بأنسا غليك تحقة بلدن الله علية الله الله الله الله الله الله الله الل	HE way may dard data that the same dark stage that they does not. They specified they does not. They specified they does not the same that they may may may may be the same that they may may may may may may may may may ma							
Mean	1.25	58.98	-	63.89	58.20	-	64.67	
SD	0.88	20.25	-	23.74	19.70	-	24.29	
		الله الله الله الله الله الله الله الله						

The .95 and .99 confidence limits for the means and SDs of Language Scores for the total sample in the first semester exam are almost normally distributed in the sample and do not differ widely in their ranges implying the high degree of significance of statistics.

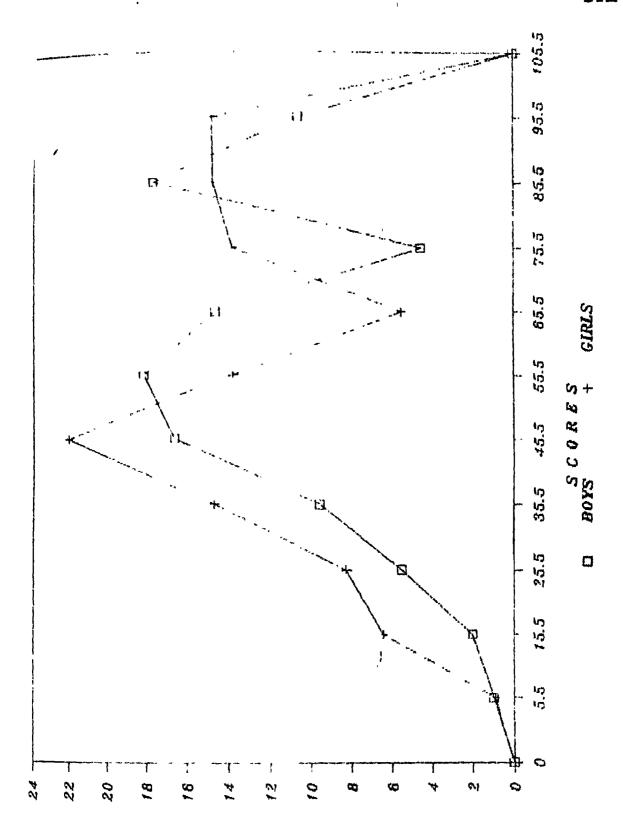
### LANGUAGE AND SEX IN FIRST SEMESTER EXAM

11481. 4.51 (a)

## DISTRIBUTION OF LANGUAGE SCORES OBTAINED IN FIRST SEMESTER EXAM FOR BOYS AND GIRLS

	~- <del></del>	en en en	gann mar aire com gant yn dag 1760 r g o 7 mp 140 r.ha f opr flyd haf 7 ff ad y ail 1 Mar 1816 aar nagh au) mais gan g	عدة عند مند بنور ويود الله ماله عدد منه على على ملك عليه ويد عليه الله عليه منه منك على الله الله الله الله ال
Sco			Bavs F %	
<del>س</del> می در	v- v-		agent and the second course of	ه الله الله الله الله الله الله الله ال
1		10	1.00	0
11		20	2.01	0.9
21	***	30	5.52	6.42
31		40	9.54	8,25
41		50	16.58	14.67
51	-	60	18-09	22.01
61	_	70	14.57	13.76
71	***	80	4.52	5.50
01		90	17.58	13.76
91		100	10.55	14.67
			managa da m	الله الله الله الله الله الله الله الله

Figure 4.31 depicts the distribution of language scores obtained in first semester exam for boys and girls in the form of frequency polygons. The frequencies are plotted in percentages.



EBEGORNGIES *

PADLE 4.31 (b)

RELEVANT STATISTICS OF LANGUAGE SCURES OBTAINED IN FIRST SEMESIFR EXAM FOR BOYS AND GIRLS

ت باندر سبح فوي وجو ضوع کين اندو	وره پيم مند بني ميه هن جديد نور ه	المراجع				
Groups	Mean	Median	Mode	SD	SK	Kur
Boys	60.82	58.97	55.26	22.20	0.250	0.318
Girls	62.56	59.45	53.24	21.55	0.432	0.300

The distributions of language scores among boys and girls in the first semester exam are almost normal with equal degree of variability. The distributions are positively skewed and are platykurtic in nature.

TABLE 4.31 (c)

# FIRST SEMESTER EXAM FOR BOYS AND GIRLS

م سارت الله علو علم جيد سيد سيد		the text that the text and the text the text	A 1645 MAR 1975 TAN AND 1984 SAN AND AND			. •
Group	SEM	•	95			99
Boys	1.57	57.74 -	- 63.91	56.76	_	64.88
Girls	2.06	58.51 -	- 66.61	57.23		67.89
	SE OF SD					
Boys	1.11	20.01	- 24.39	19.32	-	25.09
61rls	1.46	18.68	- 24.43	17.77		25.34

The .95 and .99 confidence intervals for the Means and 8Ds of both the groups are comparatively narrow which indicates the high dependability.

### LANGUAGE IN SECOND UNIT TEST

DISTRIBUTION OF LANGUAGE SCORES OBTAINED IN SECOND UNIT

TEST FOR THE TOTAL SAMPLE

1ABLE 4.32(a)

مده مين مزد	e	and page later will seem with him all of every wind large flow of the page of the seem of the page.	도 보였다. 숙하는 또 사 수에서 100% 전하는 보다는 성 전쟁에 있어요. 보였다. 보였다. 보였다. 전쟁에 단하는 점점에 전쟁을 했다는 때문을 되었다.	
Sco	res		F	SMF
1		10	o	0.67
11	_	20	2	5.33
21	-	30	14	10.00
31	-	40	1 4	19.00
41	-	50	29	22.00
51		60	23	23.00
61	-	70	62	41.67
71	-	80	40	38.33
81	-	90	73	54.67
91		100	51	41.33
		-	and on the Principles	
	٦	OIAL	30B	unig anny yari ligan kina kani gari nya kita 'nya ari dala' na

Figure 4.32 gives the original and smoothed frequency polygons of language scores obtained in Second Unit Test for the total sample.

RELEVANT STATISTICS (Nº LANGUAGE SCORES OBTAINED IN SECOND
UNIT TEST FOR THE TOTAL SAMPLE

TABLE 4.32 (b)

N	Mean	Median	Mod e	SD	SK	Kur			
			ة فقة شف سط مقد لات جهة بين فقة سن .						
308	70.37	73.00	78.25	20.20	-0.390	0.266			
					، محا مدد ملے سے بھا جب بھر بہر ہے				

The distribution of Language Scores for the total sample in Second Unit Test is fairly normal. The distribution is negatively skewed and is platykurtic in nature.

TABLE 4.32(c)

FIDUCIARY	LIMITS	QF.	MEAN	ġ.	<u>SD</u>	<u>OF</u>	LANG	SUAGE	SCORES	OBTAINED	IN
	SECON	D L	INIT	TES	5.T. 6	OR	THE	TOTAL	SAMPLE	<b>.</b>	

Stat1stic	SE		. 95			<b>,</b> 9'	9
	CONTRACTOR OF THE PARTY.	A					***********
Me an	1.15	68.11	-	72.62	67.40	-	73.33
SD	0.81	18.59	-	21.80	18.09		22.31
		اللبت الله عنيه شيئ اللبت بهواء بيدر ويا.					

The .95 and .99 confidence limits for the Means and SDs of Language scores in Second Unit Test have (F) narrow ranges. This implies that the sample statistics are dependable as true measures.

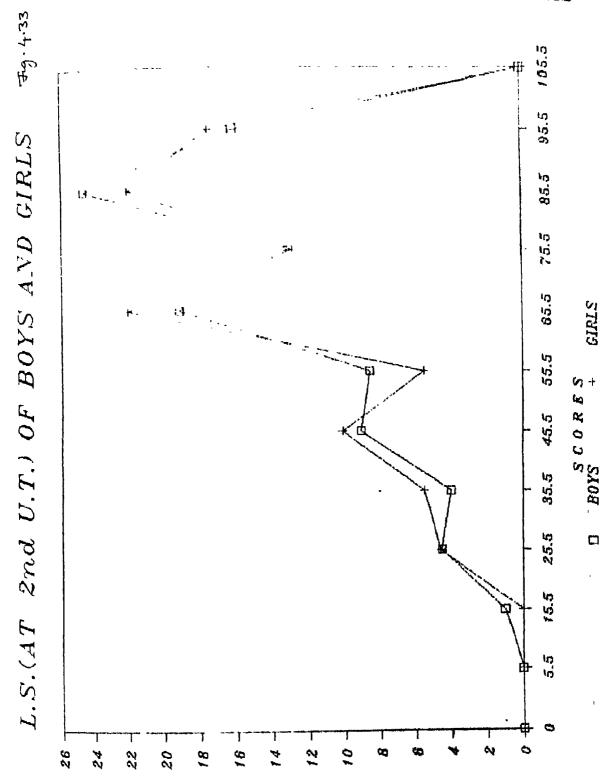
#### LANGUAGE AND BEX IN SECOND UNIT TEST

TABLE 4.33 (a)

# POR BOYS AND GIRLS IN PERCENT FREQUENCIES

	e	~	و الله الله الله الله الله الله الله الل	
Sco	res	I	Boys F % Girls	<b>E</b> F %
			وي و و د و الله الله الله و الله الله و الله	
1		10	0	0
11	_	20	1.00	0
21	_	30	4.52	4.58
31		40	4.02	5.50
41	-	50	9.04	10.09
51	-	60	Θ.54	5.50
61		70	19,09	72.01
71	-	80	13.06	12.84
81	-	90	14.62	22.01
91	<b>,,,</b>	100	16.08	17.43
			and the same and t	

Figure 4.3.3 depicts the distribution of Language scores obtained in second unit test for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



PREQUENCIES *

RELEVANT STATISTICS OF LANGUAGE SCORES OBTAINED IN
SECOND UNIT TEST FOR BOYS AND GIRLS

و القديد الجالد ومواد المام المام المام المام		10 10 10 10 10 1 1 1 1 1 1 1 1 1 1 1 1				
Group#	Mean	Median	Mode	ae	SK	Kur
		any south acts (A) or the Apple and the profess of the second	grafi anggi pir maar grafi Alah Sara yang san R	. In the same of the same of the same same	م والدي الدين	
Boy#	70.37	73.38	79.40	20.27	-0.445	0.270
Girl <b>s</b>	70.36	72.28	76.13	20.07	-0.287	0.255

The distribution of language scores for both boys and girls in second unit test is fairly normal. The distributions are negatively skewed with the distribution of boys being platykurtic and that of girls being leptokurtic.

FIDUCIARY LIMITS OF MEAN & SD OF LANGUAGE SCORES OBTAINED

IN SECOND UNIT TEST FOR BOYS AND GIRLS

	a topupal made belt अंदर, अ केश्वर अक्ट अर्थ क	тан <u>дя-ту</u> 14 ′н <del>1911</del> 1987 ′					
Group	SEM		.95			. 99	
1 of the Pay and \$100 tops also and 2	हरिक्त करणा प्रतिस्थान स्थापन करणा स्थापन					~	
Doys	1.43	87.55	•••	73.19	66.66	-	74.08
Girls	1.92	66.59	-	74.13	65.40	-	75.32
	SE of SD						
Hoys	1.02	18.27	-	22.27	17.63	_	22.90
Girls	1.36	17.39		22.74	16.55	_	23.59

The .95 and .99 confidence limits for the Means and SDs of boys and girls are comparatively narrow which indicates the high dependability.

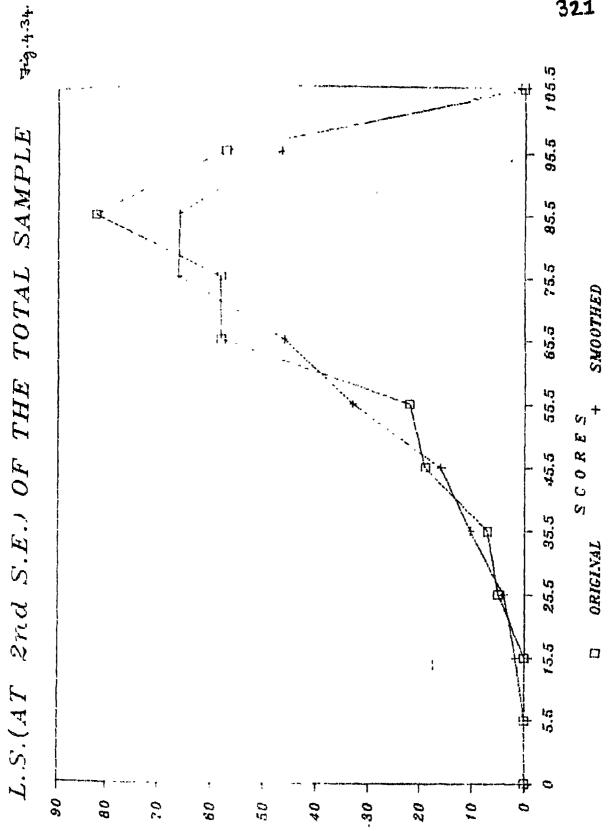
#### LANGUAGE IN SECOND SEMESTER EXAM

TABLE 4.34 (a)

### DISTRIBUTION OF LANGUAGE SCORES OBTAINED IN SECOND SEMESTER EXAM FOR THE TOTAL SAMPLE

مان منها الله في منه على منه على منه على أمن أمن الله على أمن الله على أمن الله الله والله الله الله	ar will have been start told. So gift had told day told with talk high time date with the color and told will	ا الله الله الله الله الله الله الله ال
Scores	F	SMF
마음 보다 하면 위한 마음 보다 보니 보다 보는 보는 보니 보는 보다 보는 보다 보는 보다 보니	na bira ala 1981 yan sani kai 1941 napi pambah 94a yan ali, asa 1950 yan alik alik 1950 api api al	ر به الله الله الله الله الله الله الله ا
1 - 10	o	0
11 - 20	0	1.67
21 - 30	5	4.00
<b>51</b> - 40	7	10.33
41 - 50	19	16.00
51 ~ 60	22	33.00
61 - 70	50	46.00
71 - 80	58	66.00
81 - 90	82	65.6 ⁷
91 - 100	57	46.33
	W Link Bill 10: 20	
TOTAL	308	

Figure 4.34 gives the original and smoothed frequency polygons of language scores obtained in second semester exam for the total sample.



**EBEGORNCIES** 

RELEVANT STATISTICS OF LANGUAGE SCORES OBTAINED IN SECOND
SEMESTER LXAM FOR THE TOTAL SAMPLE

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N	Mean	Median	Mode	as	SK	Kur
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308	74.98	77.91	83.78	16.74	-0.525	0.261
_			and the second of the second o			

The distribution of language scores among the total sample of children in second semester exam is near normal. The skewness of the distribution is negative and is leptokurtic in nature.

FIDUCIARY LIMITS OF MEAN & SD OF LANGUAGE SCORES OBTAINED

IN GLOUND SEMESTER EXAM FOR THE TOTAL SAMPLE

that was mile that had been by . Yes, when the first week . And	84 - M. 738	क्रमा वर्षेष्ठ स्थान वर्षेष्ठ क्षेत्रक समझ्य प्रतान क्षेत्रन प्रतान मेंगा प्रतान मानी विवास स्थान वर्णने विवास वर्ष	
Statistic	£3£	.95	ှုပုပ
giand Klady (1998) ig may charles recover also is strong and . May (red it was also file		to the delite of your flow from two doord door tooks days good days then good the	हि विश्वा प्रोतिस उनके कुंद्रिक नेवार १.४४ प्राप्ता व्यवस्थ प्रमुख प्राप्ता प्रतेतःसः वच्या
Me an	0.95	71.11 - 76.85	72.51 - 77.44
SD	0.67	15.41 - 18.06	14.99 - 18.48
t one-many professor to participate on the all all		gas was it we gave it a money of value favor layer in the state layer which belong the	

The .75 and .79 confidence limits for the Means and SDs of Language scores in Second Semester exam do not exhibit a wide range. This supports the normality of distribution and also the high degree of significance of the sample statistics.

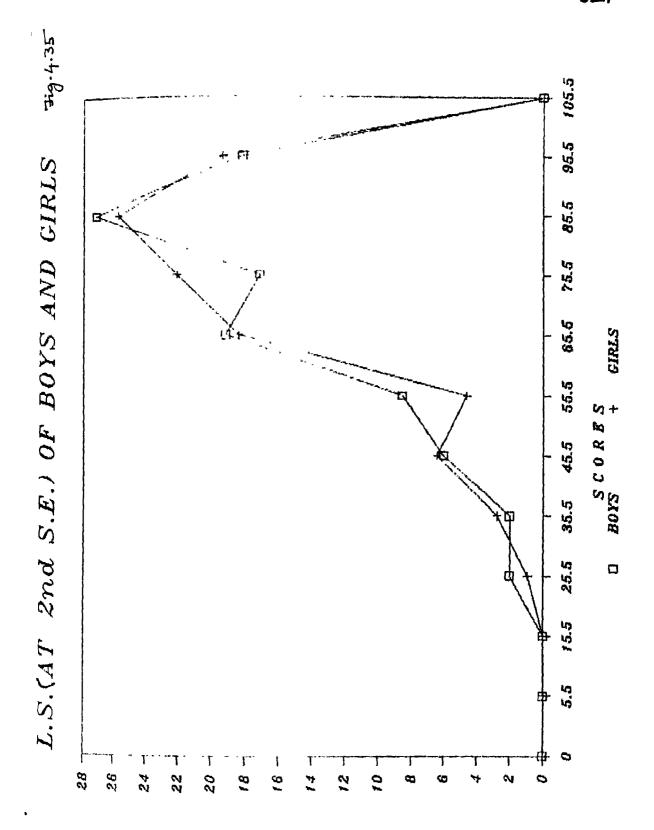
### LANGUAGE OND SEA IN SECOND SEMESTER EXAM

DISTRIBUTION OF LANGUAGE SCORES OBTAINED IN SECOND

16PUL 4.35 (a)

es		per ser mad services to the part to the M. M.		*** ***	B. P. L Mr. T T. TAN THE THE HEAD WHAT HERE VIEW HERE			- <del></del>
Scor	65		park.	ł	%	Girls	۴	ě ř•
one one	, <u></u> .	Supply from Strike in the Strike of the Stri		-	rn gat i va depresione e i	م المجاهد المج		* **
1		10	ı	.)		o		
11		20	•	1)		0		
21	-	30	<u>1</u> 1, (	Ď <b>1</b>		0.9		
31		40	2.	01		2./	ñ	
41	gen	50	6.	0,5		6.47	2	
51		60	<b>41.</b>	54		4.56	3	
61	-	70	19.	ijĢ		18.34	4	
71	Plant.	80	17.	BO		22.0	1	
81		90	27.	13		25.65	ð	
91	**	100	18.	u9		19.2	5	

Figure 4.35 depicts the distribution of language scores obtained in second semester exam in the form of frequency polygons. The frequencies are plotted as percentages.



K SEICHAAABER X

RELEVANT STATISTICS OF LANGUAGE SCORES OBTAINED IN SECOND
SEMESTER + XAM FOR BOYS AND GIRLS

	penaras Principales Alfert	7 THE STATE OF THE PART THAT THE PART THE	يه وحدة فقد عند منو فقوة فند الخد دم		
Mean	Medican	Made	SD	SK	Kur
، جود الله عند خار اليا جود عند جند ندر	enan anga at a man anga at				
74.59	77.70	83.92	16.98	-0.549	0.270
75.68	78.20	83.25	16.25	-0.466	0.246
	Mean 74.59 75.68	74.59 77.70 75.68 78.20	Mean Median Mode 74.59 77.70 83.92 75.68 78.20 83.25	Mean Median Mode SD  74.59 77.70 83.92 16.98  75.68 78.20 83.25 16.25	Mean Median Mode SD SK  74.59 77.70 83.92 16.98 -0.549  75.68 78.20 83.25 16.25 -0.466

The distribution of language scores among boys and girls are almost normal. Both have negative skewness and their variabilities too are comparable, and the group of boys is platykurtic and that of girls is leptokurtic.

FIDUCIARY LIMITS OF MEAN & SD OF LANGUAGE SCORES OBTAINED IN

SECOND SEMESTER EXAM FOR BOYS AND BIRLS

Group	SEM	.95	.99			
Boys	1.20	72.93 - 76.95	71.48 - 77.70			
Girls	1.55	72.63 - 78.73	71.66 - 79.70			
	SE of SD					
Boys	0.85	15.31 - 18.66	14.78 - 19.19			
Girls	1.10	14.08 - 18.42	13.40 - 19.10			

The .95 and .99 confidence limits for both the sexes in second semester exam have fairly narrow ranges, denoting the high dependability of these sample statistics.

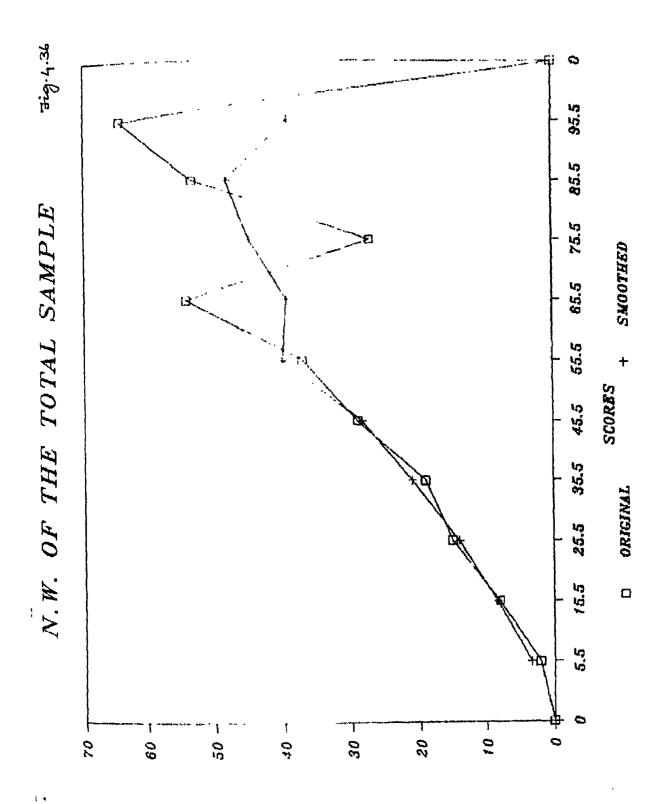
TABLE 4.36 (a)

DISTRIBUTION OF NUMBER WORK SCORES

FOR THE TOTAL SAMPLE

	, <u></u>		a gaar hippi with Mark van daar tidge safat für bank vill gift same och tyde steps wek med gifte figgs ling wille.	سنة مند الجواليس المال ودور بينه ينهم وين يول أنها فيها منهم يناه أنها الله المال الله المال الله المال الله
Sco	) <b>re</b> \$	<b>s</b>	F	SMF
1		10	2	3.33
11	ws	20	Ð	8.33
21	-	30	15	14.00
31	-	40	19	21.00
41	***	50	29	28.33
51	-	60	37	40.00
61	-	70	54	39.33
71	-	80	27	44.66
81	m	90	53	48.00
91	-	100	64	39.00
			to the contract of the second	
Tot	al		50 <del>8</del>	

figure 4.56 gives the original and smoothed frequency polygons of Number Work scores for the total sample.



**LBEG**ORNCIES

TABLE 4.36 (b)

## RELEVANT STATISTICS OF NUMBER WORK SCORES FOR THE TOTAL SAMPLE

		وه و الله الله الله الله الله الله الله			, ₄ ,	desi dan puni dan Mir. 🚾 ta
	Mean	Median	Mod €	SD	SK	Kur
			angen deren met avende Speek delte speek produktion große deren sow			
308	67.48	68.64	70.98	23.06	-0.151	0.293
_	ميد وين سي سه کيد کله بني کله	and the second s	,	THE COLUMN TWO ISSUES AND THE COLUMN TWO ISSUES IN		

The distribution of Number Work scores among the total sample of children is near normal. The skewness of the distribution is negative and is platykurtic.

TABLE 4.36 (c)

# FIDUCIARY LIMITS OF MEAN & SD OF NUMBER WORK SCORES

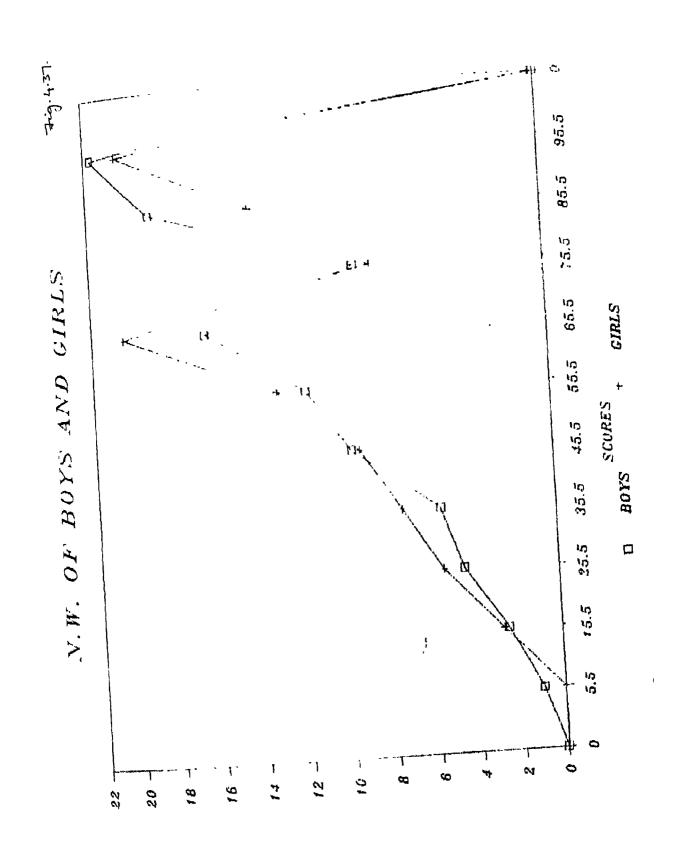
		والمنطقة الرئيس المنافقة الرئيس المنطقة المنافقة المنطقة المنظمة المنطقة المنط	24 pp j에 25 (2) 42 pp j에 pp j에 내 세 45 pp (1) 사건.
Statisti	SF	. 95	.99
the second of th	mera at the second	die bet in She the 19 to died Step Seen 130 tonly sien stell Sine enty who 1906 Speel Alle	g gypt guille spille mann stanet skynt delph skyla skyla three skyla flast rolch. 1 , , gan
Mean	1.31	64.90 - 70.05	64.08 - 70.87
SD	0.93	21.23 - 24.89	20.65 - 25.47
w a wer		han del I del sept alon 1977 hagé sera com albus sein sibil serja delle quel hagé dipin alon para sera com m	وه . الله الله الله الله الله الله الله ا

The .95 and .99 fiduciary intervals of means and SDs of Number Work scores for the total sample do not vary broadly, implying a high dependability of the sample statistics.

DISTRIBUTION OF NUMBER WORK SCORES FOR BOYS AND GIRLS
IN PERCENT PREQUENCIES

وهد دوله شک	## <b>##</b>		gay and data shift and yeak two with two dark has the	na hiyan Basa arti sura sape misu wine waar daar tisa Taba bada ahad gara rine daal 199 arti n.e
Sca	res		Boys F %	Girls F %
ناي هنو پي	عدر جنوبين	Peri sali padi beli d	क्षा हुआ है तथा प्रकार प्रमुख्या कर कार कार कार कार कार कार कार कार कार	- अंध्य प्रेष्ट्रण क्षेत्र प्रमुख स्थान प्रमुख स्थान प्रमुख स्थान सम्बद्ध इन्छ स्थान त्राच्या । इन्छ स्थान स्थ स
i		10	1.00	0
11	-	20	2.51	2.75
21	-	30	4.52	5.50
31	•	40	5.52	7.33
41	-	50	9.54	9.17
51		60	11.55	12.84
61		70	16,08	20.18
71	<b>978</b>	80	9.04	B.25
81		90	18.59	13.76
91	_	100	.1.60	20.19
Petr caph sal	, -tt		g kitin . g de paginanda kipangan kindamin ni Ma	(act (vol.) पूर्व अपने 18ई प्रमान तर्क स्थान स्थान सम्बंध स्थान स्थान स्थान स्थान स्थान स्थान स्थान क

Figure 4.17 depicts the distribution of Number Work Scores for Boys and Dirls in the form of frequency polygons. The frequencies are plotted as percentages.



FREQUENCIES (%)

RELEVANT STATISTICS OF NUMBER WORK SCORES
FOR BOYS AND GIRLS

Group <b>≤</b>	Mean	Median	Mod e	SD	SK	kur
Boys	68.21	70.03	73.66	23.26	-0.234	0.295
Girls	66.23	66.55	67.44	22.73	-0.053	0.289

the distribution of Number Work Scores among the boys and girls are almost normally distributed. Both the distributions are negatively skewed and are platykurtic industrie.

THE 4.37 (C)

CONTROL FOR BOYS AND GIRLS

		- at the bype part to		جود منت جون ولاد ميد وو ادب ب				
Group	56.14	.95				<u>.</u> 99		
Boys	1.64	64.98	_	71.44	63.95		72.46	
Girls	2.17	61.96		70.50	60.61	***	71.85	
	SE of SD							
Boys	1.17	20.97		25.56	20.24	•	28.28	
Girls	1.54	19.70	 	25.76	18.74		25.77	

The .95 and .99 confidence limits of Means and SDs of Number Work Scores for boys and girls have fairly narrow ranges, thus implying that the sample statistics are almost dependable.

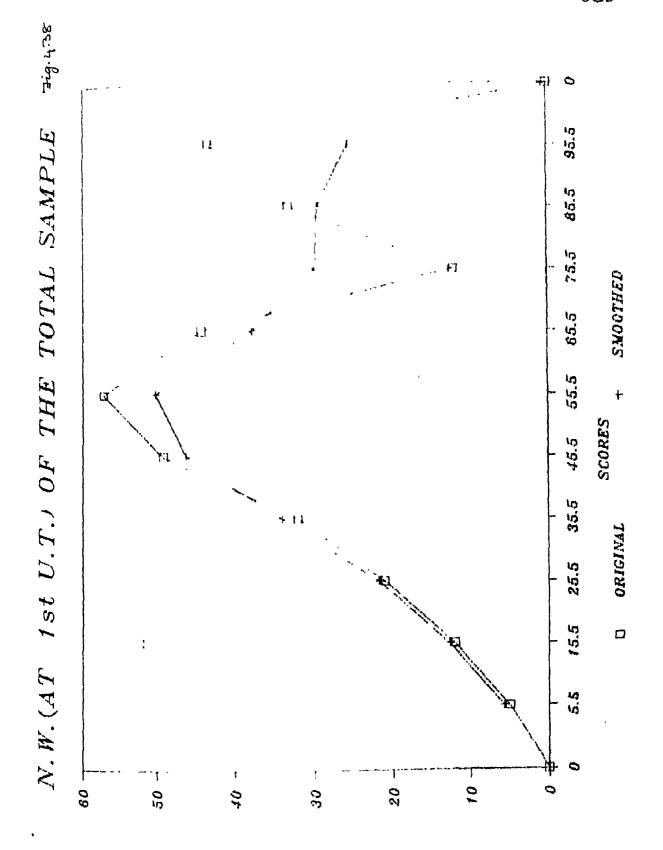
#### NUMBER WIRE IN LIRST UNIT LEST

TABLE 4.3B (a)

### DISTRIBUTION OF NUMBER WORK SCORES OBTAINED IN FIRST UNIT TEST FOR THE TOTAL SAMPLE

المراجعة والمراجعة المراجعة		क्रकारण में विद्यालया (क्रमें क्षेत्र का अर्थ । ज्यों का	B in 1855 in Steel 27 games allo Si i SSES gloci aless gaste s	त्रक प्रणा क्षाव कृत्य जोक अर्थक स्थाव कृत्य प्रमुक्त कृति स्थाव स्थाव स्थाव स्थाव त्रक स्थाव स्थाव प्रमुक त्रक स्थाप साना अपूर्
Scot	r <b>e</b> s		ſ	SMF
ter =	من من س		in the states of all the states of the state	
1	ж.	10	°2	5.66
11		20	17	12.66
21	en.	30	21	21.66
31	-	40	32	34.00
41	-	50	49	46.00
51	***	60	57	50.00
61	-	70	44	37.66
71	-	BO	12	29.66
81	**	90	.5.3	<b>29.3</b> 3
91	***	100	4.3	<b>25.</b> 33
			in a series and the series and	
Tota	a l		.508	
		the state and well don't as you as	ं केन्द्र क्षा अन्ति अस्ति । त्यां तिन स्वयं प्राथमी मिन स्वयंत्र अपि	स्थार तथन अंतर अंतर अंतर अंतर स्थार स

Figure 4.38 gives the original and smoothed frequency polygons of number work scores obtained in first unit test for the total sample.



EBEGNENCIES

1986F 4.38 (b)

RELEVANT STATISTICS OF NUMBER WORK SCORES OBTAINED IN FIRST UNIT 1851 FOR THE TOTAL SAMPLE

	and the grow good unity break from the to T		rus nitros esano,~	most to 1 is most not new white which sport is	PMF are Marie grant bytes taken the	ata di peru-
N	Mean	Median	Mode	as	SK	kur
. چې کمه اکب وها پېم	and the state of the state of the	, a u adam — A — — — — — — — — — — — — — — — — —	, ) ) d <del>(gel 20</del> 00)	APPER STATE AND A STATE OF THE		ed floor floor many and specime
308	58.42	56.64	53.07	23.72	0.225	0.284
		use hape now side is		- 40 840 804 8 - 44 94 94 144		

The distribution of Number work scores in first unit test for the total sample is normally distributed with a slight variability. The curve of distribution is positively skewed and platykuntic in nature.

(c)

FIDUCIARY LIMITS OF MEAN & SD OF NUMBER WORK SCORES OBTAINED

IN FIRST UNIT TEST FOR THE TOTAL SAMPLE

	Mg pe 144 74 1 54 1 1 1 1 1		mile :					
Statistic	SE	.95			_99			
			جين هي جي	***				
Mean	1.35	55.77	-	61.07	54.93	-	51.90	
SD	0.95	21.84	-	25.60	21.24		26.20	
			~					

The .95 and .99 confidence limits for the Means and SDs of Number Work Scores in first unit test do not vary widely, thus indicating a fairly high degree of significance of the sample statistics.

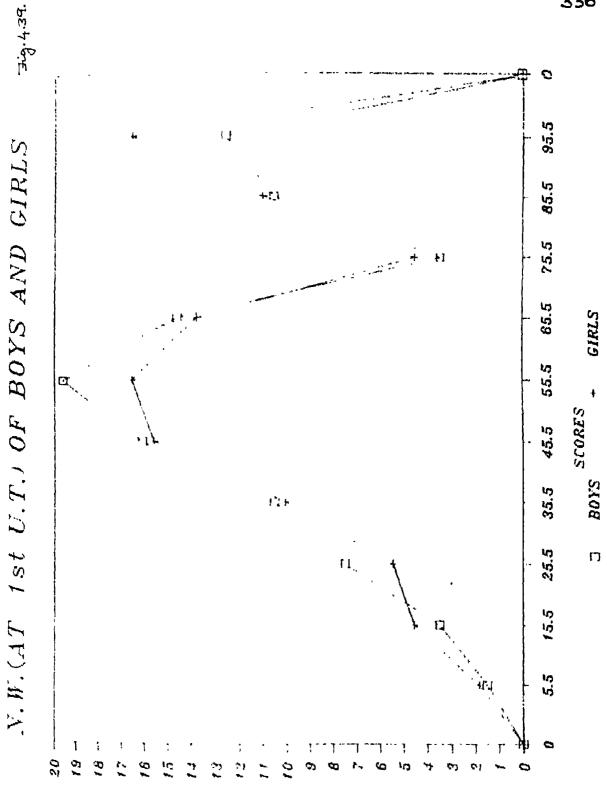
### MIMBER MORE AND OF X IN FIRST UNIT TEST

DISTRIBUTION OF NUMBER WORK SCORES OBTAINED IN FIRST
UNIT JEST FOR BOYS AND GIRLS

1AB(E 4.39(a)

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Sca	res		Boys	F	٧,	Girls	F %
		name which finds the state of the control for the state of	** *	the set to be a set	an day typ and any seek you told days have this time and seek that and the	Distance from the street of the	
1	_	10	1	.50		1.83	
11	-	20	**************************************	5.51		4.58	
21	,	30		7,53		5.50	
31	-	40	10	0.55		10.09	
41	-	50	1 6	5.08		15.59	
51	-	60	1 4	7.59		16.51	
61	-	70	1	4.57		13.76	
71	~	80	;	3.51		4.58	
81	-	90	10	0.55		11.00	
91	~	100	1	2.56		16,51	
	··	e Maria ana dana anda Jama Arma da Maria	1		nari nga man — ng Du ang Dh. Dilir migratik biya kani adali nika kani.	100 x x 100	

Figure 4.39 depicts the distribution of Number Work Scores obtained in First Unit Test for boys and girls, in the form of frequency polygons. The frequencies are plotted as percentages.



(X) SHIDNARDBAHA

RELEVANT STATISTICS OF NUMBER WORK SCORES OBTAINED IN FIRST UNIT TEST FOR THE TOTAL SAMPLE

Groups	Mean	Median	Mode	SD	SK	Kur
Boys.	57.71	56.01	52.61	23.23	0.219	0.255
Girl#	59.72	58.00	54.55	24.54	0.210	0.299

The Number Work Scores are almost normally distributed in the two groups of boys and girls in first unit test. The distributions are positively skewed and the kurtosis being leptokurtic for the boys and platykurtic for the girls.

FIDUCIARY LIMITS OF MEAN & SD OF NUMBER WORK SCORES
OBTAINED IN FIRST UNIT TEST FOR BOYS AND GIRLS

Group	ESE M		. 95			7 <b>.</b> 9
Boys	1-64	14.48	60.93	53.46	- <b>-</b> -	46.10
Girls	2155	55.11	64.32	53.65	,,	ab. '₽
	SE of SD					
Boys	1.16	20.94	 25.52	20.21	-	76.75
Girls	1.66	21.27	 27.81	20.23		.8.81

The .95 and .99 confidence limits for the Means and SDs of Number Work scores of both the sexes in first unit test have fairly narrow ranges, denoting the high dependability of these sample statistics.

#### NUMBER WORK IN FIRST SEMESTER EXAM

TABLE 4.40 (a)

### DISTRIBUTION OF NUMBER WORK SCORES OBTAINED IN FIRST SEMESTER LXAM FOR THE TOTAL SAMPLE

Cores	F	SMF
gang bang tang milah pada gang ping Papar ang ang ang ang tang tang tang tan tang ta tang ta tang tang	क्षित्रक व्यवस्थान प्रमाणका प्रकार में इस कर क्षेत्र प्रकार क्षेत्र कर कि	t the first toke take that again spirit upon tages they take take they also take the
1 - 10	3	4.33
1 - 20	10	10.60
1 - 30	1 to	19,00
1 - 40	28	24.33
1 - 50	26	33.86
1 - 60	4 /	40.00
1 - 70	47	31.00
1 - HO	1.7	F.E. 1912
11 ~ 90	101	42 - 600
1 - 100	ao	37.00
	( pg = pile	
TOTAL	308	

figure 4.40 gives the original and smoothed frequency polygons of Number Work scores obtained in First Semester Exam for the Total Sample.

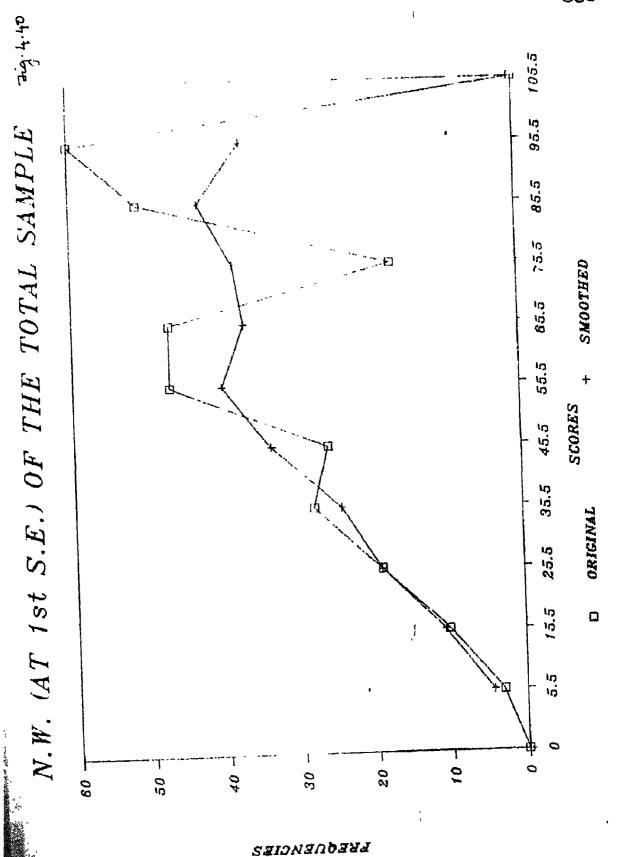


TABLE 4.40 (b)

## IN FIRST SEMESTER EXAM FOR THE TOTAL SAMPLE

To the later hand form and sme who made and made some first such date and date and state and the first first			الله والله الله فالله والله والله والله والله والله الله			
N	Mean			sp	SK	Kur
A min will days gag (						
308	64.59	64.96	65.72	24.33	-0.046	0.306

The distribution of Number Work Scores for the total sample in first somester exam is normally distributed with a slight variability. The curve of the distribution is highly negatively skewed and is platykurtic in nature.

TABLE 4.40 (c)

## FIDUCIARY LIMITS OF MEAN & SD OF NUMBER WORK SCORES OBTAINED IN FIRST SEMESTER EXAM FOR THE TOTAL SAMPLE

~~~~~~~~~~	همه ميد د د مساوي سده د د د د م	والمراجع والم والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراج					~~~
Statistic	SE	. 95				.99	
المراجع والمراجع والمراجع والمراجع المراجع والمراجع والمر	المن والا لايان أحمد والمناطق فياما أوجاه وبيان عمد الله	، حجه کانا جدم البلغ جب بینان بسیر خدر بیسه			• *		
Mean	1.38	61.87	-	67.30	61.01	-	68.16
SD	0.98	22,40		26.26	21.79		26.87

The .95 and .99 confidence limits for the means and SDs of Number Work Scores for the total sample in the first semester exam have relatively narrow ranges implying the high degree of significance of statistics.

NUMBER WORK AND SEX IN 1ST SEMESTER EXAM

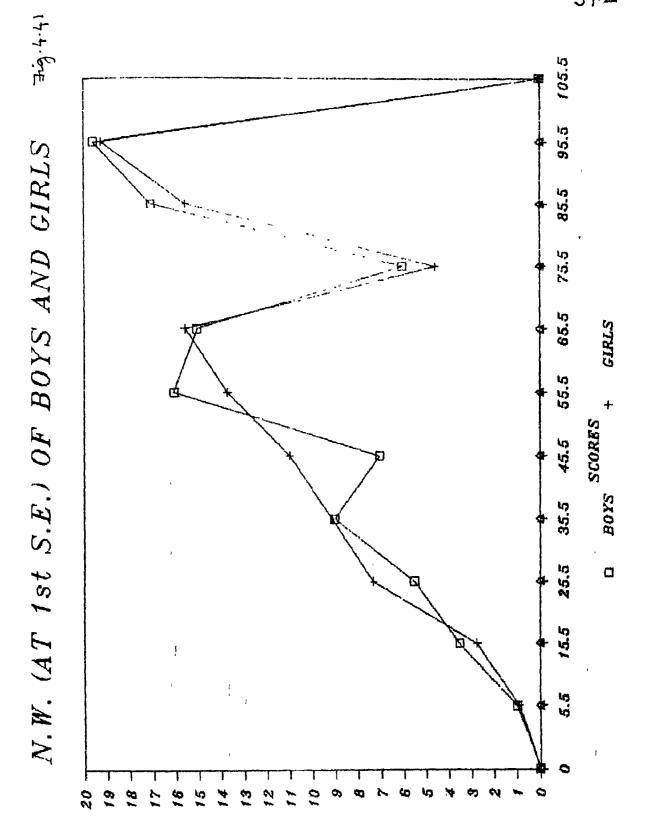
TABLE 4.41 (a)

DISTRIBUTION OF NUMBER WORK SCORES OBTAINED IN FIRST SEMESTER.

EXAM FOR BOYS AND GIRLS IN PERCENT FREQUENCIES

Sco	res		Boys F %	Girls F 4
			100 March 100 Ma	
1	4 7 F	10	1.00	0.92
11	_	20	3.52	2.75
21	mrb	30	5.53	7.34
31	2-0	40	9.05	9-17
41	***	50	7.04	11.01
51	~	60	16.08	13.76
61		70	. 15.08	15.60
71	••	во	. 6.03	4.59
81	-	90	17.09	15.60
91	-	100	19.60	19.27
			ست بناء بناء جن جن سن بلکا پیشا سار کال کا جن لینا لینا کال کا کا کا با بناء بناء بناء بناء بناء بناء بناء	

Figure 4.41 depicts the distribution of Number Work scores obtained in first semester exam for boys and girls in the form of frequency polygons.



Lurdarncire (x)

TABLE 4.41 (b)

RELEVANT STATISTICS OF NUMBER WORK SCORES OBTAINED IN

FIRST SEMESTER EXAM FOR THE BOYS AND GIRLS

N	Mean	Median	Mode	SD	SK	Kur
Boys	45.09	65.67	66.80	24.27	-0.072	0.296
Girls	63.67	63.74	63.88	24.43	-0,008	0.317

The distribution of Number Work Scores among boys and girls in the first semester exam are almost normal with equal degree of variability. The distributions are negatively skewed and platykurtic in nature.

FIDUCIARY LIMITS OF MEAN & SD OF NUMBER WORK SCORES OBTAINED

IN FIRST SEMESTER EXAM FOR BOYS AND GIRLS

				م ورو کان بده کان دند داو در		~~~	****
Group	SEM		. 9	5	.9	9	
Boys	1.72	61.73		68.47	60.66		69.54
Girls	2.34	59.08	p.	68.25	57.63	-	69.70
	SE of SD						
Boys	1.22	21.87		26,66	21.11	-	27.42
Girls	1.66	21.17	_	27.68	20.14		28.71

The .95 and .99 confidence intervals for the means and SDs of both the groups are comparatively narrow which indicates the high dependability.

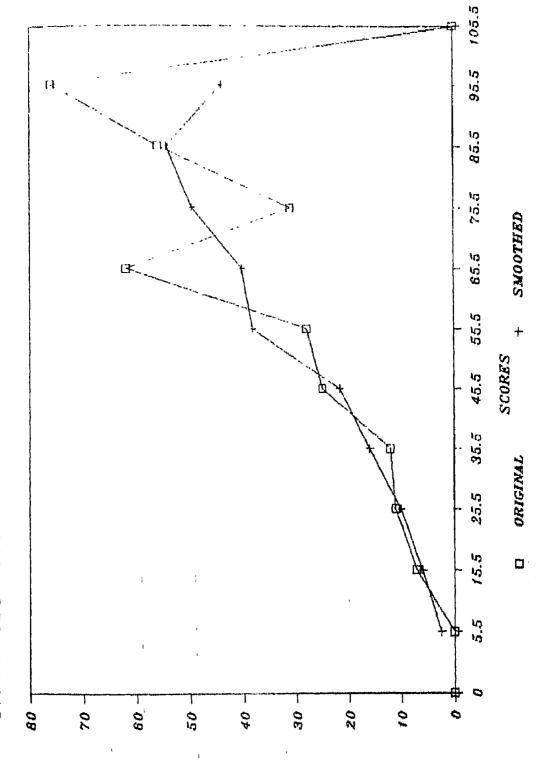
NUMBER WORK IN SECOND UNIT TEST

DISTRIBUTION OF NUMBER WORK SCORES OBTAINED IN SECOND
UNIT TEST FOR THE TOTAL SAMPLE

	4, -		سی میں میں بہت رہیں گئٹ شب شب بہت اپنے کہ اور اپنے اپنے اپنے اپنے کہ اپنے کی اپنے کی گئی ہیں۔ اپنے کہ اپنے کہ	ada dag may sah dali tigay atay diga diga tida tida tigay tida tida tigan mar tina diin 🕞
Sco	r 8 5		F	SMF
· -	~~ ~~ = 1 =	5-8 m/50 m/si 15-4	लार कर कार कार कार कार मान दिया पार किया पर किए तह जा कार कार कार कार कार कार कार कार कार का	المام المرام
1	***	10	ø	2.33
11	•	20	7	00.6
21	-	30	11	10.00
31		40	12	16.00
41		50	25	21.67
51	_	60	28	38.33
61		70	62	40.33
71	,_	80	31	47.67
81	-	90	56	54.33
۶1	~~	100	76	44.00
			gang agan agan ting main gant tilar	
7	ATOTA	L	308	
			and the state of t	

Figure 4.42 gives the original and smoothed frequency polygons of Number Work Scores obtained in Second Unit Test for the total sample.

N.W. (AT 2nd U.T.) OF THE TOTAL SAMPLE



LEEGUENCIES

RELEVANT STATISTICS OF NUMBER WORK SCORES OBTAINED IN
SECOND UNIT TEST FOR THE TOTAL SAMPLE

TABLE 4.42 (b)

	في همه ليم في ايم فيه الم مع هم هم		والمنظ الدي مواند عبيه سياه المناه	بت سن دون کف انداز دیده مید کند کند.		
N	Mean	Median	Mode	SD	SK	Kur
		then the tile the tile the ray on. w. s.s. r		ية عدد وغير المام ويون الله عند حرب جدد الله	با ويباه منظ نوبية وبيا ميرية دينة تدبة عدية	per than the the segretary of the se
308	71.27	73.40	77.65	21.49	-0.2 9 7	0.287
a. 4		the time that they are than the high tree the property		~~~~~~~~~~~~		

The distribution of number work scores for the total sample in second unit test is fairly normal. The distribution is negatively skewed and platykurtic in nature.

TABLE 4.42(c)

IN SECOND UNIT TEST FOR THE TOTAL SAMPLE

	بد میں میں نے جے <u>کے جے بے</u>	المراد شياد جيوا ليهم نصب القيد هنية الربيد ديمة الربيد				3
Statistic	SE	.9	5	.99		
art, with Mills scale durin Mills scale creat with cates during spin an	-,,,,,,,,,,	، کی شده سید کنگ آلای سال خشم اسی بندی دنیده جوی ،	ية منية جين جين عين عين جين جين ا		~ ~ ~	~~~~
Mean	1.22	60.87 -	73.67	68.11	~-	74.43
SD	0.86	19.79 -	23.19	19.25	₩.	23.73
، بدر دون منه من ليد ابدا هنه منا منه سه منه ا		,				

The .95 and .99 confidence limits for the Means and SDs of Academic Achievement scores in Second Unit Test have very narrow ranges. This implies that the sample statistics are dependable as true measures.

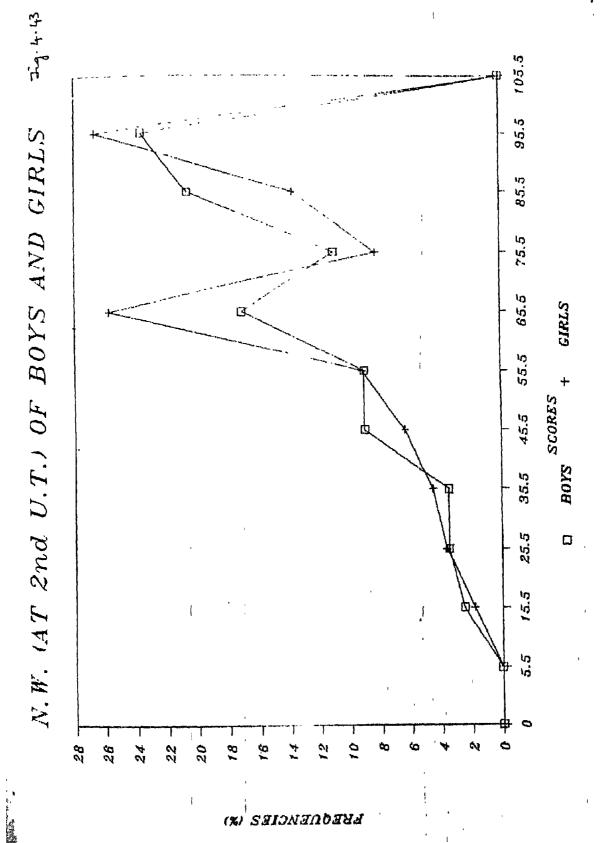
NUMBER WORK AND SEX IN SECOND UNIT TEST

DISTRIBUTION OF NUMBER WORK SCORES OBTAINED IN SECOND UNIT

[ABLE 4.43 (a)

			·	-
Scor			·	Girls F %
1		10		o
11	****	20	2.51	1.83
21	***	30	3.51	3.50
31	_	40	3.51	4.58
41	-	50	9.04	6.47
51	~	60	9.04	9.17
61		70	17.08	25.68
71		80	11.05	8.25
81	_	90	20.60	13.76
91	_	100	23.61	26.50
				الله . كا الله الله الله الله الله الله الله ا

Figure 4.43 depicts the distribution of Number Work Scores obtained in second unit test for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



RELEVANT STATISTICS OF NUMBER WORK SCORES OBTAINED IN
SECOND UNIT TEST FOR BOYS AND GIRLS

Groups	Mean	Median	Mode	ae	SK	Kur
Boys	71.37	75.27	83.05	21.62	-0.540	0.291
Girls	71.09		67.70	21.26		0.277

The distribution of Number Work Scores for both boys and girls in second unit test is fairly normal. The distribution of the boys is negatively skewed and girls is positively skewed. The distributions are platykurtic in nature.

TABLE 4.43(c)

OBTAINED IN SECOND UNIT TEST FOR BOYS AND GIRLS

ئتے سے کہا گا۔ سیم آبادہ نیاب جی اسد میل اباد	ه ادام شده امام هند چه اينها بينه سند بالد شده بيدار	ه وحد خان باین کند سب وجو خد، نب					
Group	SEM		. 95		د العاد مجود شود مصر العاد العرب مسا سور مارد م	# · · · · · · · ·	99
	4 67	40.77		74.38	67.42	_	75.33
Boys	1.53	48.37	-	/4.30	07.72		* Lat 4 4 1 1 1
Girls	2.03	67,10	-	75.08	65.84		76.35
	SE of SD						
Boys	1.08	19.48	****	23.75	18.61	-	24.42
Girls	1.44	18.42	*** *** 	24.09	17.53		24.99

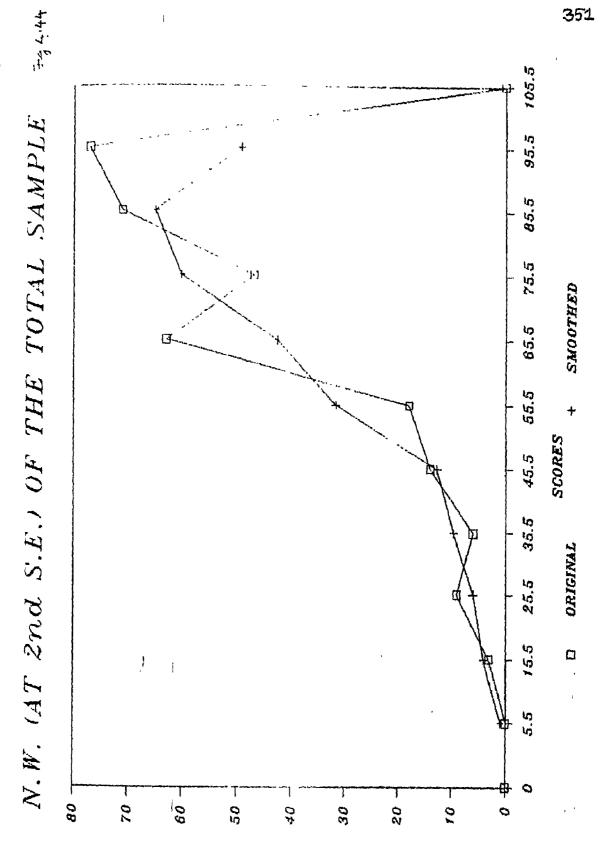
The .95 and .99 confidence limits for the Means and SDs of boys and girls in second unit test are comparatively narrow which indicates the high dependability.

NUMBER WORK IN SECOND SEMESTER EXAM

DISTRIBUTION OF NUMBER WORK SCORES OBTAINED IN SECOND
SEMESTER EXAM FOR THE TOTAL SAMPLE

utt Mair ajes		100 mm ===	الله الله الله الله الله الله الله الله	
5c a	res	•	F	SMF
-47 -57 184		-1 44 47 74	بود عليه ميه الما عليه ويت بيت عمر ياب جمل ماه جار، حار الله وعد الله عليه عليه ويته الله ميه الله عليه ماه عق - الله الله عليه الله عليه الله عليه الله عليه عليه عليه عليه الله عليه الله عليه الله عليه عليه الله عليه علي	
ı	-	10	o	1.00
1 i		20	3	4.00
21		30	9	6.00
31	-	40	6	9.67
41	***	50	14	12.67
51	_	60	18	31.67
61	_	70	63	42.67
71		80	47	60.33
81	-	90	71	65.00
91		100	77	49.33
			يتميد وسيدة الشاء فيصد فيها فيهاد فيهاد فيهاد فيهاد فيهاد	
Tot	: a 1		308	

figure 4.44 gives the original and smoothed frequency polygons of Number work scores obtained in second semester exam for the total sample.



EREGUENCIES

RELEVANT STATISTICS OF NUMBER WORK SCORES OBTAINED IN
SECOND SEMESTER EXAM FOR THE TOTAL SAMPLE

· 大						
N	Mean	Median	Mode	SD	SK	Kur
, 41 54 17 164	医乳蛋白蛋白 医甲状腺 医甲状腺 医甲状腺	عب عبيد والله والله والله والله والله والله والله والله الله		ي هيان هيان مين سود عن اليون الي	سية حيد خيبة ليقلة جب حيج الأنت بيط عنم -	No. 100 100 740 750 707
308	75.40	79.22	96.96	18.62	-0.615	0.274
		distribution and the second of				

The Number Work Scores are almost normally distributed among the total sample in second semester exam. The distribution is negatively skewed and platykurtic.

TABLE 4.44 (c)

FIDUCIARY LIMITS OF MEAN & SD OF NUMBER WORK SCORES OBTAINED IN SECOND SEMESTER EXAM FOR THE TOTAL SAMPLE

Statistic	SE	.95			. 99		
المام والد مون القام بيان مون الورد والد الله الورد المام والد	ه اسم اميار واله شطة سبب سيق بيند شبه يسيد	الله المالة					
Mean	1.06	73.32 -	77.48	72.66	-	78.14	
SD	0.75	17.15 -	20.10	16.68	-	20.57	
real formers, and rely face was one one for win					~		

The .95 and .99 confidence limits for the Means and SDs of Number Work Scores in second semester exam do not exhibit a wide range. This supports the normality of distribution and also the high degree of significance of the sample statistics.

NUMBER WORK AND SEX IN SECOND SEMESTER EXAM 1ABLE 4.45 (a)

IN SECOND SEMESTER EXAM FOR BOYS AND GIRLS IN PERCENT FREQUENCIES

Sco	res	<u>t. 11 meta atua atua 1</u>	Boys F %	Girls F %
	e		and the start and the star was the start open and this gas was been the start only only only only only only only only	
1	_	10	0	o
11		20	1.00	0.71
21	****	30	2.51	3.65
31	-44	40	2.51	0.91
41		50	4.52	4.58
51	****	60	5.52	6.42
61		70	21.10	19.26
71		80	15.57	14.67
81	-	90	22.61	23.85
91	-	100	24.62	25.68
				. « « « « « « « « « « « « « « « « « « «

Figure 4.45 depicts the distribution of Number Work scores obtained in second semester exam for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.

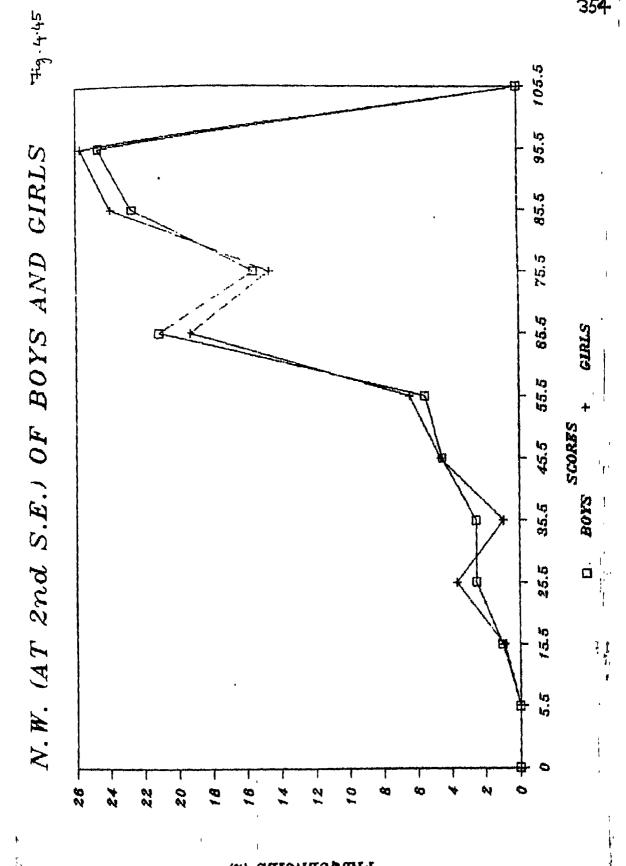


TABLE 4.45 (b)

RELEVANT STATISTICS OF LANGUAGE SCORES OBTAINED IN SECOND

SEMESTER EXAM FOR BOYS AND GIRLS

Groups	Mean	Median	Mode	SD	SK	Kur
	, 40	والمراجع فالدوائد والدوائد والمراجع والمراجع والمراجع	مهانه للحق اللحة واحد جيزان بحدي الكلي اللحة الــــــــــــــــــــــــــــــــــــ			
Boys	75.24	78.72	85.67	18.55	-0.562	0.271
Girls	75.68	80.18	89.19	18.76	-0.719	0.279

The distribution of Number Work scores among both boys and girls in second semester exam are almost normal. Both have negative skewness and their variabilities too are comparable and both are also platykurtic.

TABLE 4.45 (c)

FIDUCIARY LIMITS OF MEAN & SD OF NUMBER WORK SCORES OBTAINED

IN SECOND SEMESTER EXAM FOR BOYS AND GIRLS

	م بيت هي نيب هي دي هي مي مي مي مي هي		
Group	5EM	.95	.99
Boys	1.31	72.67 - 77.82	71.95 - 78.64
Girls	1.79	72.15 - 79.20	71.04 - 80.32
	SE of SD		
Boys	.93	16.72 - 20.38	16.14 - 20.96
Girls	1.27	16.26 - 21.27	15.47 - 22.06

The .95 and .99 confidence limits for both the mexes in second semester exam have fairly narrow ranges, denoting the high dependability of these sample statistics.

GENERAL KNOWLEDGE

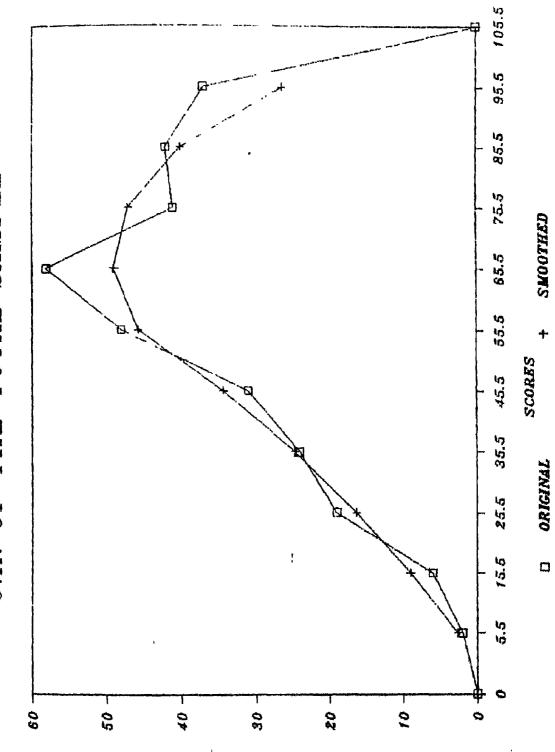
TABLE 4.46 (a)

DISTRIBUTION OF GENERAL KNOWLEDGE SCORES FOR THE TOTAL SAMPLE

			بد بندن وجو واق کارنا شاه ناشه باید جین شده سه چاپ سید جین شده باید شده شده سم یادی شده باید جین باید بهرو بهرو	همور بين مود. سدن دينه ماده وهاي بيني هيئ ويان لوقة لولية كماء كان تعدير بيني هيئ والمد المرد هيد ماده هيد
Sco	r 0 5	,	F	SMF
~ ·- ·		~~~~	بيارا بينه يبيد يبيو جيوا بيدا جي احد عده جي بيد بين بيد بين بيد بيد بيد بيد بيد يبير وي بيارا بيد بيد بيد بيد	الله مواد الله حيث والله الله من جين الله والله والله الله الله الله عن حيث بنية الله الله الله الله
1		10	2	2.67
11	quei	20	6	9.00
21	-	30	19	16.33
31	-	40	24	24.67
41	-	50	31	34.33
51	plane	60	48	45.67
61	-	70	58	49.00
71	-	80	41	47.00
ខារ	***	90	42	40.00
91	**	100	37	26.33
			gas and the test then said side pilly make	
7	OTA	4L.	308	

Figure 4.46 gives the original and smoothed frequency polygons of General Knowledge scores for the total sample.

G.K. OF THE TOTAL SAMPLE



EBROUENCIES

RELEVANT STATISTICS OF GENERAL KNOWLEDGE SCORES FOR

THE TOTAL SAMPLE

TABLE 4.46 (b)

大學 医大型 医乳腺						
N	Mean	Median	Mode	SD	SK	Kur
بکا کا جان کی شہر ہے:		- विशेष करिये केंद्रिय प्रतिनों रुक्ता गोर्का गांका गांका स्थाप स्थाप प्रत्या प्रत्या स्थ	والمراد مادي والو والمال الملك الملك المال ا	F and 1840 1840 1444 1444 1444 1446 1446 144		
308	63,42	64.63	67.06	21.64	-0.168	0.266

The distribution of General Knowledge scores for the total sample of children is near normal. The skewness of the distribution is negative and is platykurtic.

FIDUCIARY LIMITS OF MEAN & SD OF GENERAL KNOWLEDGE SCORES
FOR THE TOTAL SAMPLE

基本 有限 有限 有限 明显 有限 使生 通知 计可 计数 使性 有效 化烷						
Statistic	SE	. 95	,	. 79	•	
وماها الله كالله عليه وجود والها والماه والماه الماه الماه الماه والماه الماه الماه الماه الماه الماه الماه الم	مين مين مين مين مين دين مين مين دين	jan Grand ergerer papar Afrika stadisk fransprinski papar afrika stadisk separa Sejah sta				
Mean	1.23	61.00 -	45.83	60.24 -	66.60	
SD	0.87	19.92 -	23.35	19.38	23.90	
ر مين جين جين جين کينا پيٽ آهه جيگ شت کان	ت ۱۹۰ کرد ۱۹۰ می اس بین سر بین ش	*	حدد فتب خاند پذیر نظی بیشد نیشم بود، پری ای			

The .95 and .99 fiduciary intervals of means and SDs of General Knowledge scores for the total mample do not vary broadly in their ranges, indicating the dependability of the sample statistics.

GENERAL KNOWLEDGE AND SEX

TABLE 4.47 (a) .

DISTRIBUTION OF GENERAL KNOWLEDGE SCORES FOR BOYS AND GIRLS IN PERCENT FREQUENCIES

ا تابع هنا عب			اليون ويون منها الله الله الله الله الله الله الله ا	ميم مسه يعلو طلبه طبيعة للقدم عليها أفوام بلها الكله يقدل عيون فدوا أثقاله كلها الله المناه مدار
Sco	r 0 4		Boys F %	Girls F %
چە ئىرى مان		(100 cale with part of	هيئة فلهم فرجط بورة وفرق مشك مشهر مواه وزير وأنك كلاك فراه بنده جدو جوية باكه هده . 100 جدير طائد مورو بديل نجوز ورون وارد بغين	يجام دين هند دول هند هند ويت بين المن المن المن المن المن المن المن الم
1	-	10	0.50	0.90
11	HAF	20	2.01	1.83
21	ølm	30	6.03	6.42
31		40	7.04	5.50
41	Pit	50	9.54	11.00
51		60	14.57	17.43
61		70	18.59	19.26
71	 .	80	13,56	12.84
81		90	13.56	13.76
91	-	100	12.56	11.00
			و مولة لموا مراك مولة مولة مواه مراك الموا والموا مراك مراك مراك الموا والموا مراك مراك المواكد والمواكد والموا	

Figure 4.47 depicts the distribution of General Knowledge scores for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.

EREGUENCIES (X)

RELEVANT STATISTICS OF BENERAL KNOWLEDGE
SCORES FOR BOYS AND SIRLS

N	Mean	Median	Made	SD	SK	Kur
Boys	63.54	64.95	67.79	21.81	195	. 273
Carls	43.20	64.07	45.90	21.31		.256

The distribution of General knowledge scores among boys and girls are almost normally distributed. Both the distributions are negatively skewed and the distribution for boys is platykurtic and girls leptokurtic.

TABLE 4.47 (c)

FIDUCIARY LIMITS OF MEAN & SD OF GENERAL KNOWLEDGE

SCORES FOR POYS AND GIRLS

	جانب وجود محمد شخف محمد الشاط مياند والحدد ميان شايد بايدية ويواد الشام بينية ويون شابط ويونه المحد مايده المد منابع	# - # - #		
SEM	.95	.99		
1.54	60.50 - 66.57	59.34 - 67.53		
2.04	59.20 - 67.20	57.93 - 68.47		
SE of SD				
1.09	19.66 - 23.97	18.98 - 24.65		
1.44	18.47 - 24.15	17.57 - 25.05		
	1.54 2.04 SE of SD 1.09	1.54 60.50 - 66.57 2.04 59.20 - 67.20 SE of SD 1.09 19.66 - 23.97		

The .95 and .99 confidence limits of Means and SDs of General Knowledge scores for boys and girls have fairly narrow ranges, thus implying that the sample statistics are almost dependable.

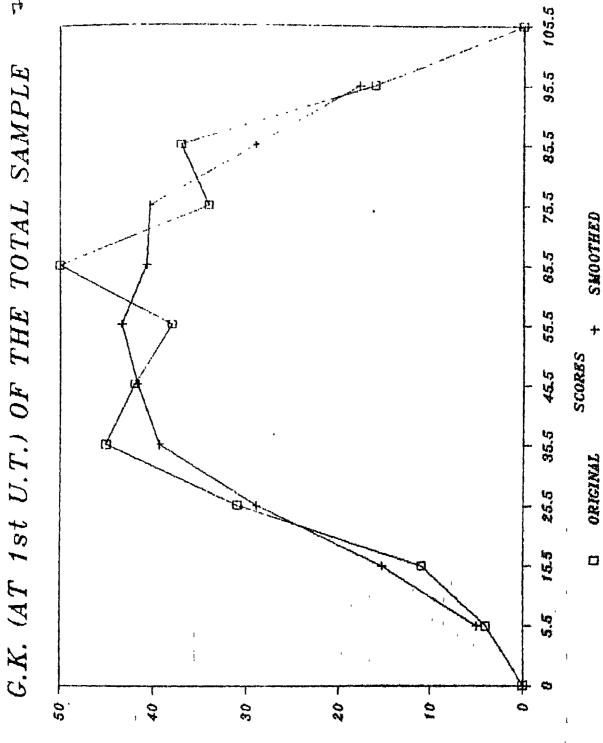
GENERAL KNOWLEDGE IN FIRST UNIT TEST

TABLE 4.48 (a)

DISTRIBUTION OF GENERAL KNOWLEDGE SCORES OBTAINED IN FIRST UNIT TEST FOR THE TOTAL SAMPLE

Sc	ore	15		SMF
1	First	10	4	5.00
11	-	20	11	15.33
21	_	30	31	29.00
31	1 -12-	40	45	39.33
41	_	50	42	41.66
51	_	60	28	43.33
61	شدرو	70	50	40.66
71		80	34	40.33
81	-	90	37	29.00
91	-	100	16	17.66
			क्रमा क्षेत्र प्रभव क्षमा वर्षीन क्षेत्र व्यक्त	
	TO	TAL	308	
				ي الله الله الله الله الله الله الله الل

Figure 4.48 gives the original and smoothed frequency polygons of General Knowledge scores obtained in first Unit Test for the Total Sample.



ERROUBNCIES

TABLE 4.48 (b)

RELEVANT STATISTICS OF GENERAL KNOWLEDGE SCORES OBTAINED IN FIRST UNIT TEST FOR THE TOTAL SAMPLE

يبت يولو وال سيد مان الداء	وهود عدورة مواد المقال المالة الاواد المالة	क्षा होता प्रमुख सिंदर सर्वात (ASE श्राम स्ट्राम (व्यक्त स्ट्राम)				
N	Mean	Median	Mode	SD	sk	Kur
	حد مد ب. ب. ب. _{ب. ب.}		منيه منبه بهد بيد منه منه منه بيد منبه منيه	بربد جون حود نامد هشد نوانه سرو دهد الم		
308	55.62	56.02	56.81	22.44	-0.052	0.295
				,, ,,, ,,, ,,, ,,,, ,,,, ,,,, ,,,,,,,,	***	

The distributions of General Knowledge scores in first unit test is normally distributed with a slight variability. The curve of distribution is negatively skewed and is platykurtic in nature.

TABLE 4.48 (c)

FIDUCIARY LIMITS OF MEAN & SD OF GENERAL KNOWLEDGE SCORES OBTAINED IN FIRST UNIT TEST FOR THE TOTAL SAMPLE

20 100 this old life file file and life file in the life and life							
Statistic	SE		.95		•	99	
والمن بسائر اللها أوجه اللها بمؤاء بالأم المؤال المؤال أماله المؤال المؤال	الواد عابد الاد عابد الواد عابد الداد الدا	يسه دهوا خوا. خواي عادت جندة ياكثار تحود فادلو ال		جعد عبد سبنة عبد حب تنام سيده مثلاً			
Mean	1.27	53.12		58.13	52.32	_	58.92
SD	0.90	20.66	-	24.22	20.10	-	24.79
والمراد المراد	. مورد نشت شبه بایت بیشه نبیه مسید اس	ه باهدا هواي خصت کالت وزيزيه يتبول جندي إدب رجد					

The .95 and .99 confidence limits for the means and SDs of General Knowledge scores in first Unit Test do not vary widely. This indicates a fairly high degree of significance of the sample statistics.

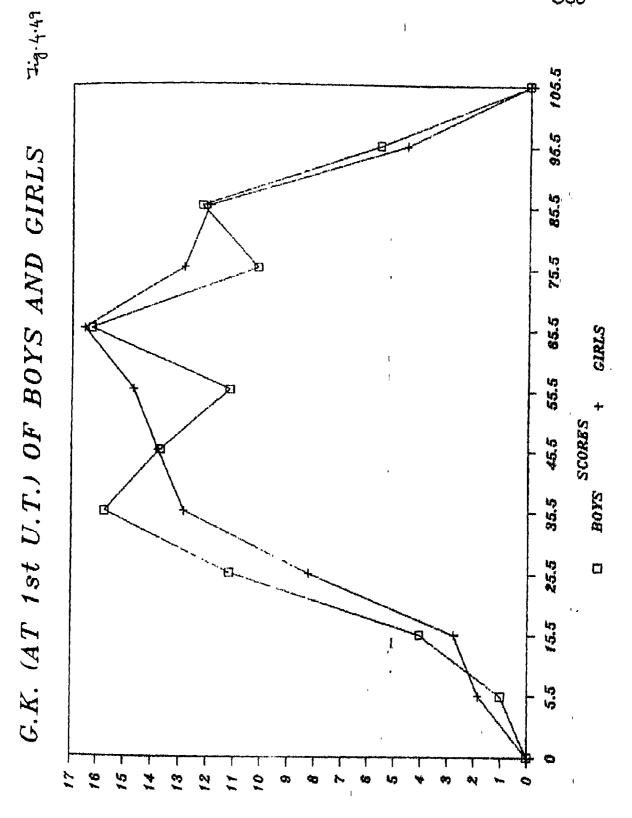
GENERAL KNOWLEDGE AND SEX IN FIRST UNIT TEST

TABLE 4.49(a)

UNIT TEST FOR BOYS AND GIRLS IN PERCENT FREQUENCIES

Scores	Boys F %	Girls F %
1 - 10	1.01	1.83
11 - 20	4.06	2.75
21 - 30	11.16	8.25
31 - 40	15.73	12.84
41 - 50	13.70	13.76
51 - 60	11.16	14.67
61 - 70	16.24	16.51
71 - 80	10.15	12.84
B1 - 90	12.18	11.92
91 - 100	5.58	4.58
	er ald only yes gate had not wish this gast after was big, yes som den Rick yes intel did they wis will be?	

Figure 4.49 depicts the distribution of General Knowledge scores obtained in First Unit Test for Boys and Girls in the form of frequency polygons. The frequencies are plotted as percentages.



LEEGUENCIES (%)

TABLE 4.49 (b)

RELEVANT STATISTICS OF GENERAL KNOWLEDGE SCORES IN THE

FIRST UNIT TEST FOR BOYS AND GIRLS

	نشاه سند لبدن منه بادن درم جب شده شد		والمراه والمرافقة فيدو وإنها والمرافقة والمرافقة والمرافقة			
N	Mean	Median	Mode	SD	SK	Kur
	** *** == == *** *** ***				و همه خود جود المها المها المها المها المها	an way was han and high Pan Mig.
Boys	54.94	54.36	53.20	22.84	0.076	0.301
Girls	56.69	57.68	59.67	21.83	-0.134	0.287
	مان منال میان مید مید وجود پیش مید					

The distributions of General Knowledge scores among boys and girls in first unit test are almost normal with equal degree of variability. The distribution of boys is positively skewed and that of girls is negatively skewed. The distributions are platykurtic in nature.

FIDUCIARY LIMITS OF M & SD OF GENERAL KNOWLEDGE SCORES

IN THE FIRST UNIT TEST FOR BOYS AND GIRLS

یں۔ سے چور ہے۔ شار خان اس لیاں انس کے		ب دیده جود بیت کند شور دخو جود چود کرد.	~~ ~~ ~~		<u> </u>		
Group	SEM			.95			.99
مين منب بشم هاد چيو پيش منب يشن شه	الاناس للمن جميد مناه القدر مامل أحمد بالأن المناه وحد والمنا المناه والمناه والمناه والمناه والمناه	من بدو بدو بدو بنوه مدو البدؤ التي يسبد بدوا عليه	144 to 144	يرفه ميش دمه مناظ شب نوزن الاخد هنار	2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014 - 2014		-
Boys	1.62	51.75	-	58.13	50.74	-	59.14
Girls	2.09	52.59	-	60.79	51.29	-	62.08

TABLE 4.49 (c) - Contd.

हमा प्रकृत करने स्थाप करने एको क्षेत्र स्थाप प्रकृत स	男 中間 明日 日本	धन क्रिया के अपने क्षेत्र क्षेत्री एक प्रकार के प्	· 14年 《		من جل بناء بين بين بين مين مين
Group	SE of SD	•	75	.99	
	हेत कुला महोते कोई क्षेत्रिक किसी स्थाप प्रकार पूर्ण २ र व वे ४ स्थाप स्थाप ५५६ स्थाप		ية ووز زحد سيد شنط شدو شدو شاه الله	in the said the sain said the sain said and said	
Bay s	1.15	20.58	- 25.11	19.86	- 25.82
Girl s	1.48	18.92	- 24.74	19.00	- 25.66
			*** *** ear do the par ser sq. s		

From the entries in the above table it is clear that the General Knowledge scores for boys and girls in first unit test are almost normally distributed in the sample. The .95 and .99 confidence limits for General Knowledge in first unit test do not differ widely in their ranges implying the high degree of significance of statistics.

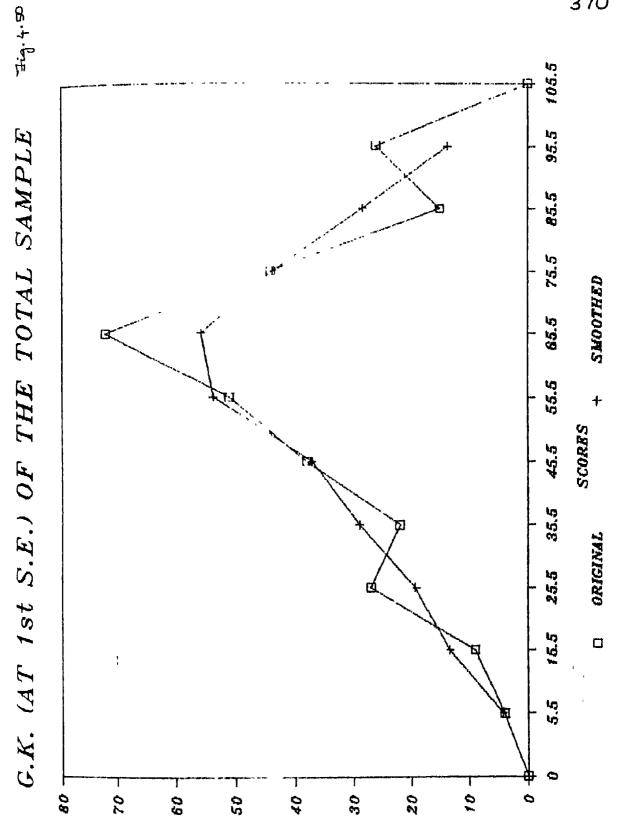
GENERAL KNOWLEDGE IN LINST SEMESTER EXAM

TABLE 4.50 (a)

FOR THE TUTAL SAMPLE

40 -9 10	, vu ~		स्था है के प्रमुख करते हैं कि प्रमुख स्थानिक के बेला के प्रमुख करते हैं कि प्रमुख करते हैं कि प्रमुख करते हैं कि प्रमुख करते हैं कि प्रमुख करते हैं	it tier uit. Der tijd 2-0 til - uit viell der men men von blig bligt mit beld (pr. der Williams der ball step und
Scr) T e	8	t.	SMF
	معد معد ،	100g - 2 2 5 11 14 15	r Mills for Mills for Jr. P I GATS IN No. 6 to 444 this deep dead is you made a	ti. In 1865 2011 says care done had were take take date gang Tages takes done meth sade salle. De saap soor sade kade say
1	_	10	4	4.33
11	S MIT	20	9	13.33
21	ves	30	27	19.33
.51		40	22	29.00
41	_	50	38	37.00
51	••	60	51	53.67
61	an	70	72	55.6 7
71	-	80	44	43.67
81		90	15	23.33
91	April	100	26	13.67
			daily riam your will, with head yoke hair state good grids trapp	
Tot	al		308	
	~~.		. The latter work is broad also late gains are one had soon way and which their page soon made along page balls along they had	بينة بيات بية الله الدر سنة سرات عليه دور بالآن الله الله الله الله الله الله الله والله الله

Figure 4.50 gives the original and smoothed frequency polygons of General Knowledge scores obtained in First Semester Exam for the total sample.



FREQUENCIES

RELEVANT STATISTICS OF GENERAL KNOWLEDGE SCORES OBTAINED IN
FIRST SEMESTER EXAM FOR THE TOTAL SAMPLE

	من النبي ومن النبل فيأن مناه ومن النبل المن النبل أمن	g agin digg grin plan grav trijt bird grav de - Pir	, 14 May 184 보기 보고 원수, 14 Mai 보면 기능	و عابد عند الله دور بين الله عابد عند		page start from high their bear well
N	Mean	Median	Mode	SD	SK	Kur
		. All with the same that the same that the same that the				
308	58.42	60.91	65.90	21.21	-0.352	0.231
-	ه سمت خوار نیس چاپ نمس جان پسید بروی	يون درند هيد اخت جدد ميد شيط حين درند خداد در		الله الله الله الله الله الله الله الله	هند جماد جميد هنيد هنيد وي المحاول منيه جميد وهيد وي.	

The distribution of General Knowledge scores for the total sample in first semester exam is normally distributed with a slight variability. The curve of the distribution is negatively skewed and leptokurtic in nature.

TABLE 4.50 (c)

FIDUCIARY LIMITS OF MEAN & SD OF GENERAL KNOWLEDGE SCORES

OBTAINED IN FIRST SEMESTER EXAM FOR THE TOTAL SAMPLE

a deposition and district their company to the				المنا		a pp. 44 cm = 4
Statistic	SE	.95			.99	
ونعده مسهرات استراسه ويونو		No. in a second to come				
Melan	1.20	56.05	60.79	55.30	-	61.54
SD	0.85	19.52 -	22.89	18.99	- 	23.42
		.,				

The .95 and .99 confidence limits for the Means and SDs of General Knowledge scores for the total sample in the first semester exam are almost normally distributed in the sample, and do not differ widely in their ranges implying the high degree of significance of statistics.

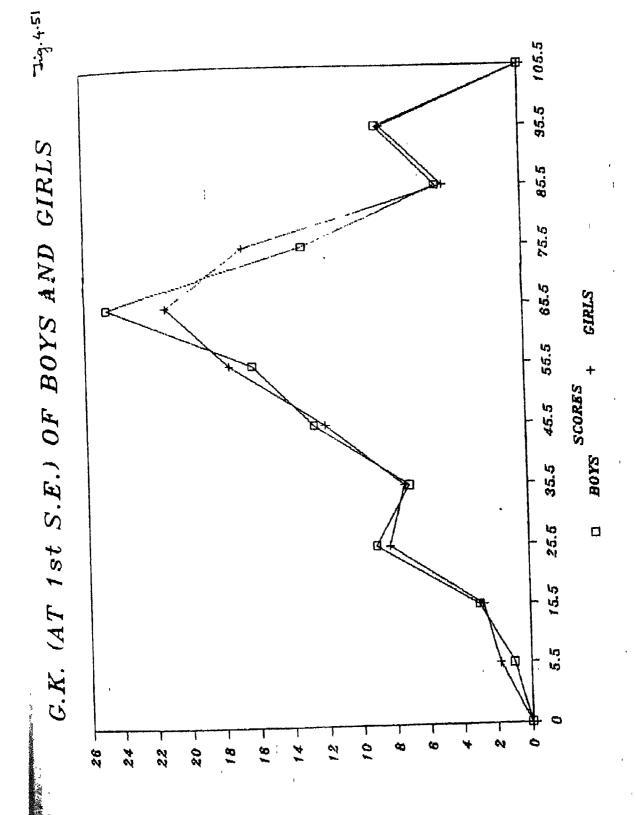
GENERAL KNOWLEDGI AND SEX IN FIRST SEMESTER EXAM

DISTRIBUTION OF GENERAL KNOWLEDGE SCORES OBTAINED IN FIRST SEMESTER EXAM FOR DOYS AND GIRLS IN PERCENT FREQUENCIES

TABLE 4.51 (a)

	, and his w		yan, perin hi fundan mentende hit his teritori hi in in the teritori de de destructiva de perinde peri	الله الله الله الله الله الله الله الله
Sc	ore	7	Boys F &	Girls F %
-44 m	40.00	v +4 ** - **	and the second section of the section of t	مرت روي مورد مورد مورد مورد من درد الرواح ومن مورد مورد مورد مورد مورد مورد مورد مورد
1	,	10	1.00	1.83
11		20	3,01	2.75
21	•	30	9.04	8.25
31	-	40	7.03	7.33
41	Love	50	12.56	11.92
51	44	60	16.08	17.43
61	***	70	24.62	21.10
71	 ,	80	13.06	16.51
81	-	9 0	5.02	4.58
91		100	8.54	8.25
40.00				

Figure 4.51 depicts the distribution of General Knowledge scores obtained in first unit test for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



EBRONENCIEZ (X)

TABLE 4.51 (6)

RELEVANT STATISTICS OF GENERAL KNOWLEDGE SCORES OBTAINED

IN FIRST SEMESTER EXAM FOR BOYS AND GIRLS

	روم میں کا ایک فید بھی میں می _ں غیر	ينده حدد ميته بطلة نصب بالله ميد حدد مدد	و مراه دانه و دان و دان کان کان دان دان دان دان دان دان دان دان دان د	** 1 Tr 1 Tr	مال بين وناة اسد مانا سے جب وجم وال ش	s page diggs gards may have "A sell delibr
Group#	Mean	Median	Mode	SD	SK	Kur
ه نيب (50) شية (60) شد وها هن		الدار الدار البيد وبيلة فين حدة كلي يرهد الدار فدو		الم والما المرابع المرابع من المرابع المرابع المرابع المرابع المرابع المرابع المرابع المرابع المرابع	الله الله والله الله الله الله الله الله	g pick though given to a see before direct
Boys	50.41	61.01	66.20	21.11	-0.368	0.226
Girls	58.43	60.71	65.28	21.39	-0.320	0.239
		, _	، بس نمید شاه کی هم شاه سب سب د		الله حاسر موار الله عدد عدد الله	

The distribution of General Knowledge scores among boys and girls in the first semester exam are almost normal with equal degree of variability. The distributions are negatively skewed and leptokurtic in nature.

FIDUCIARY LIMITS OF M & SD OF GENERAL KNOWLEDGE SCORES
OBTAINED IN FIRST SEMESTER EXAM FOR BOYS AND GIRLS

~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	ومط كبيا خيره خليو فيؤك ثايت هك حيره يبتة		 				
Group	SEM		.95	•	99		
~	الله الرواد الله الله الله الله الله الله الله ال	1044 DAS 7003 1119 BAS 1827 BAY 654	 . Mile mige 40th 40th 60th 60th 70th 70th	क्षांत्र नेक श्रम स्टब्स स्टब्स स्टब्स स्टिस्स			*** ****
Boys	1.49	55.48	 61.34	62.27		54.55	
Girls	2.04	54.42	 62.45	53.15	-	63.72	
							

TABLE 4.51 (c) - Contd.

이번 대한 때한 작성 후꾸 먹다 프랑 리눅 수상 때문	garen desar depart bases have begin very system and to the state begin state of	마마 소리 보니 소리 보도 가장 되는 아니 아니 아니 아니 아니 수에 수실 하고 보도 선택하고 있다.	***
Group	SE of SD	. 95	. 99
مناه فالم جانب وعام المام المام عادد المام المام المام المام	स्तार कुम्बा श्रीकृत स्तातत (१९९०) कुम्ब अनुस्त अस्तात केम्पी संतुक्त स्तात्त स्तात्त क्रमात्त्र कृता	والله ينطق والأور والأور المام والمام والمام والمام والمام والمام والمام والمام فيدام فرهدة والمام موجود والمام	
Boy s	1.06	19.03 - 23.19	18.37 - 23.85
Girls	1.45	18.53 - 24.23	17.63 - 25.14
يت الراء عمر دول مون بين جاند عادر سنة شون	يد المامية المراجعة	. 언크, 스탠드 가는 그런지 본슨 전략은 작품을 맞는 것들은 프로그 시작을 보았는 때는 것들은 것들은 것들은 것들은 것들은 것들은 것들은	الله والمراجعة الله الله الله الله الله الله الله الل

The .95 and .99 confidence intervals for the means and SDs of both the groups are comparatively narrow, which indicates the high dependability.

GENERAL KNOWLEDGE IN SECOND UNIT TEST

TABLE 4.52 (a)

DISTRIBUTION OF GENERAL KNOWLEDGE SCORES OBTAINED IN
SECOND UNIT JEST FOR THE TOTAL SAMPLE

	يشد فحد لنج	ڪة جيءَ بنيو سيد	يلم يؤون هيئة ناباء مربة عليه عليه وقية عليه مناه عليها جواة بيان عبد فيه يابته فيت بينت بينت عبد المن من مرب مين من	ر الله العلق الله الله الله الله الله الله الله ال
Sco	res		F	SMF
			نظ هاب وقط هاب اولا وقط وارد مربط واله آنها وارد الهو وقم وقود مراه وها أنوا أنوا وقم وقم ووي بهم ووي هوم وفي هوم يدني ويوم وجود 	د حيث بايت هن حيث بهد جيد جيد جيد جيد جيد جيد جيد جيد حيد حيد حيد حيد حيد حيد حيد حيد حيد ح
1	quera .	10	o	1.33
11		20	4	5.33
21	-	30	12	12.33
31	_	40	21	20.00
41	PR	50	27	34.00
51		60	54	43.33
61	water	70	49	47.33
71	-	80	39	47.67
81	-	90	55	47.00
91	-	100	47	34.00
			name plant from hard half Mayor havin down state and the	
Tot	al		308	
-		F 404 540 140 14	و معلون برسا هاي ومم والله وال	ويدر منها منتها والبدار والدر مانت المدر منتها منتها ويتبا أمنته منتها ويتبا أمنته حاليا منتها منتها

Figure 4.52 gives the original and smoothed frequency polygons of General Knowledge scores obtained in second unit test for the total sample.

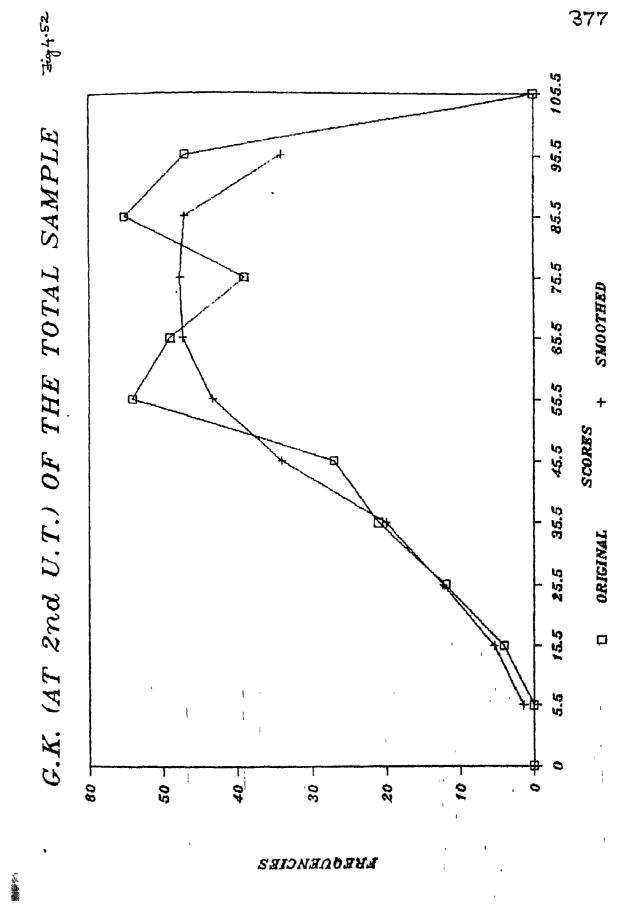


TABLE 4.52 (b)

RELEVANT STATISTICS OF GENERAL KNOWLEDGE SCORES OBTAINED

IN SECOND UNIT TEST FOR THE TOTAL SAMPLE

		ين پيرت، شوره سني نالقه ماناه مايان سني هاي مانان بيس 	ن برنم چین میش بیش باید در			
N	Mean	Median	Mode	SD	sĸ	Kur
	، شمير پوخل ميڪ شويد سيم جيس مايد جيڪ شهير	ن سبه بس یمی وادی ویت نیبی سی بطاله عدم سین بیان	40 MM with over wear size man and size way at	**		
308	67.15	67.84	69.22	20.67	-0.100	0.284
	~ 	و جے سہ بات ہواہ سہ جے اگاہ اباد عیرہ جور ابل		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		

The distribution of General Knowledge scores for the total sample in second unit test is fairly normal. The distribution is negatively skewed and platykurtic.

TABLE 4.32 (c)

DETAINED IN SECOND UNIT TEST FOR THE TOTAL SAMPLE

	هند النظ ويود وابه بينت جاند البند بيب واب	من وين هيئ هيئ وين من شيل وين هيئ هيئ هيئ وين وين	الله والله الله الله الله الله الله الله			
Statistic	SE	, 95		•	99	
tion with last wife dight along price display with black price-again	enga dilipa agan wasin bian dilisa nant musi Mark Mina wat	read many read hings were upon man halo data made made finis de-	الله حقة الله يائه على على بنير عيد ر			الولا ملك الحدد على ميني بينها ا
Mean	1.17	64.84 -	69.46	64.11		70.19
SD D	0.83	19.03 -	22,31	18.51	<u>.</u>	22.83
ميان نيوي ميدر شود شود ماري عالي عالم العال العال أول أول	الله الله الله الله الله الله الله الله				-	

The .95 and .99 confidence limits for the Means and SDs of General Knowledge scores in second unit test have very narrow ranges. This implies that the sample statistics are dependable as true measures.

GENERAL KNOWLEDGE AND SEX IN SECOND UNIT TEST

TABLE 4.53 (a)

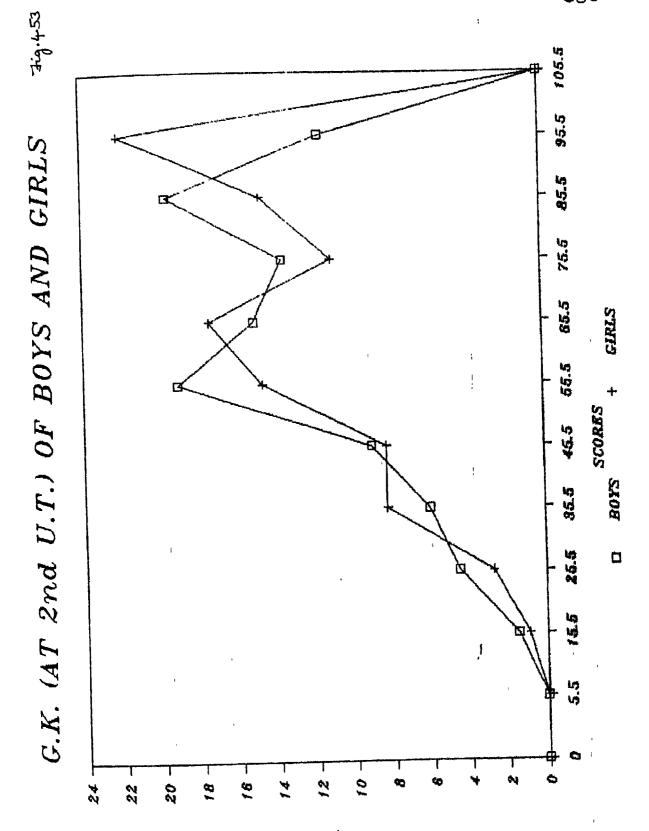
DISTRIBUTION OF GENERAL KNOWLEDGE SCORES OBTAINED

IN SECOND UNIT TEST FOR BOYS AND GIRLS

IN PERCENT FREQUENCIES

Sco	res		Boys F %	Girls F %
ای وای سن	and the Alfa is		ويقي يهيد شهر هوه وهوه داهه هاي وهوه وهوه الله وهوه وهوه وهوه وهوه وهوه	ياسا مركا كانت الدي والله الذات منت مارك والله تجله بارك بالها فيلنا عبية، بإرام وابل به
1		10	0	0
11	,, <u></u>	20	1.50	0.90
21	-	30	4.52	2.75
31	410	40	6.03	8.25
41		50	9.04	8.25
51	pre-	40	19.09	14.67
61		70	15.07	17.43
71	•	80	13.56	11.00
81	~	90	19.59	14.67
91	~	100	11.55	22.01
			And the color was able to the color than when the land that they also make day part plat that they shall then you dold that who does not took them.	ريان المراجع ا

Figure 4.53 depicts the distribution of General Knowledge scores obtained in second unit test for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



FREQUENCIES (*)

TABLE 4.53 (b)

RELEVANT STATISTICS OF GENERAL KNOWLEDGE SCORES OBTAINED IN

SECOND UNIT TEST FOR BOYS AND GIRLS

And wide wide state day 444 445	منه کنی میش میش بیش بیش میش بیش میش میش میش			و هيون ميده ميدود بيانية بيانية وده هندو هيون و	الرياء الذي الذي الذي الذي المال الدين المال الدين الدين الدين الدين ا	
Group s	Mean	Median	Mode	SD	SK	Kur
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		والمنظم المنظم		* 164 TT TO TO TO SEE SEE SEE SEE SEE	بة فيهر طرار بينه علاد طرار اينية طالد سرة الشه وإنك حد	ni laif ipar fine dali una Typ
Bays	66.15	67	68.69	20.37	124	.283
Girls	68.98	69.18	69.58	21.08	-0.028	.300
		e tiper diffe and then jobs who make you can maj	والمراجعة	والمراجعة والمراجعة والمراجعة والمراجعة	جن حصر النامة ليسط خلام بلوارة الوارة حجم جنس بلود ب	

The distribution of General Knowledge scores for both boys and girls in the second unit test is fairly normal. The distributions are negatively skewed and platykurtic in nature.

FIDUCIARY LIMITS OF MEAN & SD OF SEX-WISE DISTRIBUTION

OF GENERAL KNOWLEDGE SCORES OBTAINED IN SECOND

UNIT TEST FOR BOYS AND GIRLS

خالف فين خول الرواز الذي الأول الدوار الدوار	جزبة خفين المثام سبب بجيد جاسا ادبان جبيب پيادي عبيد، سبد	الله هيئة كلمة بالباد بين جيئة والد فيس من ويط فيان للزباد	ه حسا همه بنده کبید میش است کی بیش بست کی د	والمراجعة والمراجعة والمراجعة والمراجعة والمراجعة والمراجعة	par	
Group	SEM	. 9	75		. 99	ı
مهمية جواند والهوا لاحل بالكاء شوال خنان	فللت منهم جمع لالتي بينت وليل التين فيون التين التين التين	والدور والمراجع المراجع والمراجع والمرا	والمراجعة المام	كالم وسك بشار علك كباط فيفر دامن بينك هجوا يميا		
Boys	1.44	63.32 -	- 48.98	62.42	-	69.67
Girl _s	2.01	65.02	- 72.94	63.77	-	74.19

TABLE 4.53 (c) - Contd.

선생 등은 보다 아이 병원 수를 맞아 쓰는 말이 살아 수		ينه هم شر بين بين هي هي هي اس چه بين يه يو نيز من بين من بين دين بي	动 法企 Na No
Group	SE of SD	.95	,99
	nd ind and and and any one too any one and	يغير سية فينيز كالله يترف ميش ميش مين مين مين فيند فيند فيند فيند فيد مند مند	त्रीत कीत प्रति होते कीत कीत त्रीय करों केन होते कोई त्रीय कोत कीत कोत की त्राह्म केन्द्र का व्याव कुन्त हाति
Boys	1.02	18.36 - 22.38	17.72 - 23.02
Girls	1.43	18.27 - 23.89	17.38 - 24.78
		骨气瘤毒水类医毒物物溶液有毒毒毒	等 化异氯苯酚 医骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨骨

The .95 and .99 confidence limits for the Means and BDs of boys and girls are comparatively narrow which indicates the high dependability.

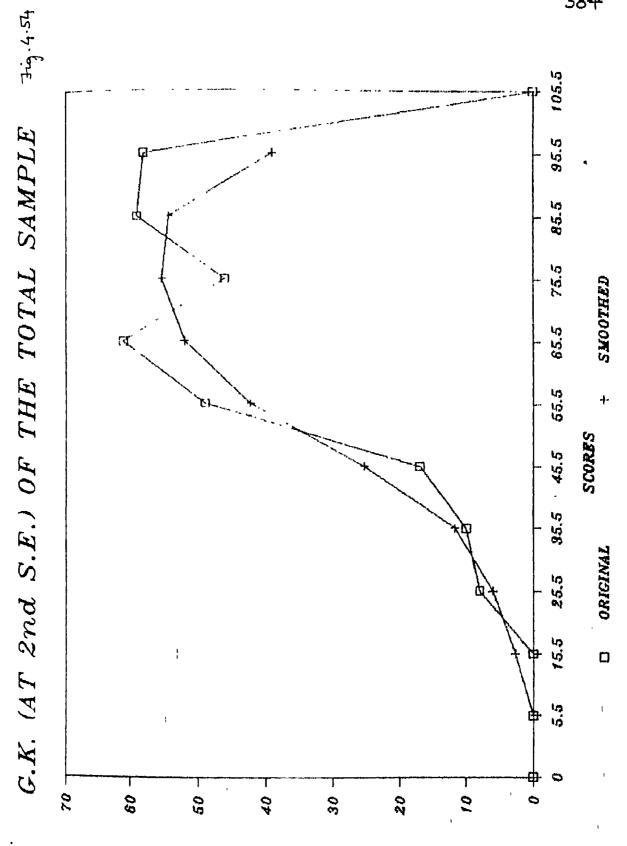
GENERAL KNOWLEDGE IN SECOND SEMESTER EXAM

DISTRIBUTION OF GENERAL KNOWLEDGE SCORES OBTAINED IN SECOND SEMESTER EXAM FOR THE TOTAL SAMPLE

TABLE 4.54 (a)

به جمع ميد ديد هم جمه هم هم اين ينه هي المراجع مي هم عم	ي بيون زيائم شده نسب بهن هجة عشر دنن (به) ويري جون عند خده هجات إشار ذاته به (به منطقة الله فقار، نترب فردة بدن مد	पूर्व विश्वति क्षेत्रिक क्ष्मारी अवस्त्र तेत्राक कृत्यान कृत्यान कृत्यान क्ष्मार क्ष्मार अन्त्रत्व अन्त्रक क्षमा
Scores	F	SMF
المنظم	يه هم يوني بودي ويون منه بديت واب مرب دريه عدال داخله داخل المنه الأول ويون داخل الماء بالأد داخل الماء الماء الماء	क्रण क्रमण नीमी इंडिंग प्रथम नीम् अभि दार्ग प्रथम नाम क्रमण क्रमण क्रमण क्रमण क्रमण क्रमण क्रमण क्रमण क्रमण क्
1 - 10	0	0
11 - 20	0	2.67
21 - 30	8	6.00
31 - 40	10	11.67
41 - 50	17	25.33
51 - 60	49	42.33
61 - 70	61	52.00
71 - 80	46	55.33
81 - 90	59	54.33
91 - 100	58	39.00
	न्त्रक नहींने देखी त्रिक्त करूर नहींने कहेंगे सुद्ध स्टब्स स्थान क्षेत्र	
TOTAL	308	

Figure 4.54 gives the original and smoothed frequency polygons of General Knowledge scores obtained in second semester exam for the total sample.



EREGUENCIES

TABLE 4.54(b)

RELEVANT STATISTICS OF GENERAL KNOWLEDGE SCORES OBTAINED

IN SECOND SEMESTER EXAM FOR THE TOTAL SAMPLE

	و المدر جالة منها يناه ميك ميل كان يكان الكان كان	والكال والله والزار المدار المدار والله والله والله والله والله	işter şalan işala siyan gelişir (Pilan O'44 yadır dayız yarın va	ي. ويس والدن باب مشي 200 فالند الله: 1965 ك	ينها الآواد بيدان أحدث الدين بيوني والما المادة الأدين الرواد الدول	land you down to the state
N	Mean	Median	Mode	SD	SK	Kiar
	ه مدن جدن سنڌ هند جمع لحد بجد الله الله	والمدورة والمحافظة المدادة الموادية وموادة المدور الموادة المدادة	E 2 1 M N N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	F Nove & M. Mart Mall rapp with brook at 2 as	الله د ادي طابق بيندا ڪال کاري جوڻ هيٺ انه <u>اي وي</u>	rayon yası - om
308	71.76	72.45	73.03	18.18	-0.113	O.299
			ing the state of the same of t	er 1000 Mile till term men genn best stem stage g	7 to -1 or to do not in or -	

The distribution of General Knowledge screens among the total sample of children in second semester examination normal. The skewness is negative and platykurtic in nature.

TABLE 4.54 (c.)

FIDUCIARY LIMITS OF MEAN & SD OF GENERAL KNOWLEDGE SCORES OBTAINED IN SECOND SEMESTER EXAM FOR THE TOTAL SAMPLE

Statistic	SE .95		.95		•	99
the may have said while their their saids made states from their	والم المرابع المرابع المرابع والمرابع المرابع المرابع المرابع المرابع المرابع المرابع المرابع المرابع المرابع	سدد کارک طاحر طبیع بهبات کستر محبود برایک پسر	<u></u> -	المراجعة هيوا فاراد بالمراجعة والمراجعة	ارس کاک های بیان کی البت این در بیان	well data and they we are you play
Mean	1.03	69.73		73.79	69.09	- 74.43
SD	0.73	16.73	-	19.62	16.28	- 20.07

The .95 and .99 confidence limits for the Means and SDs of General Knowledge scores in second semester exam do not exhibit wide range thus depicting the high degree of significance of the sample statistics.

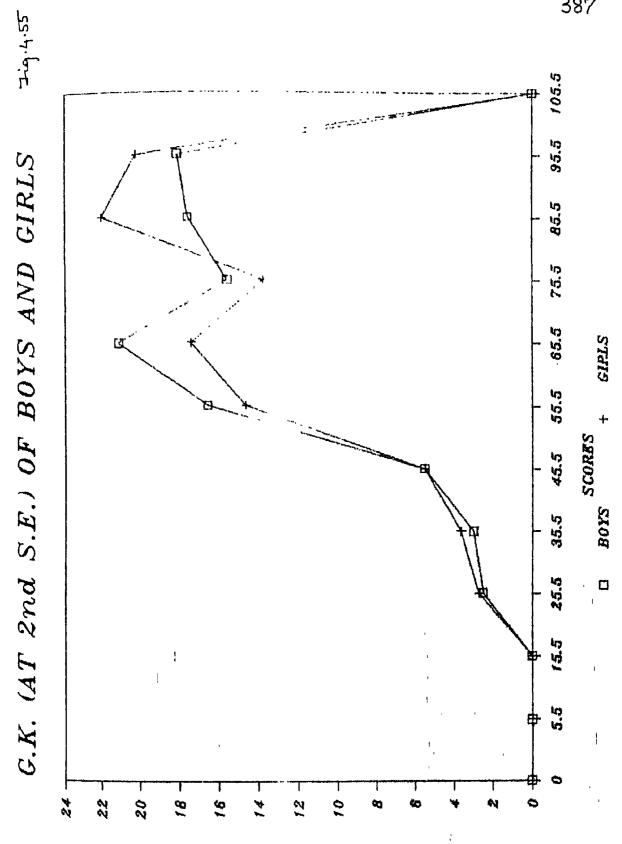
GENERAL KNOWLEDGE AND SEX IN SECOND SEMESTER EXAM

TABLE 4.55 (a)

DISTRIBUTION OF GENERAL KNOWLEDGE SCORES OBTAINED IN SECUND SEMESTER EXAM FOR BOYS AND GIRLS IN PERCENT FREQUENCIES

Sco	Scores		Boys F %	Girls F %
- سب مي	ے شہ سے <u>ر</u>	and the second s	O	Market and all the United year personal and a second and a second a second a second a second a second a second
1		10	V	O
11		20	o	o
21	-	30	2.51	2.7%
31	44	40	3.01	3.64
41	-	50	5,52	5.00
51	-	60	16.58	14. 67
61	-	70	21.10	17.4%
21		80	15.57	13.74
81	wi	9 0	17.58	22.(1
91	***	100	18,09	20.111

Figure 4.55 depicts the distribution of General Knowledge scores obtained in second semester exam for hope and girls in the form of frequency polygons. The frequencies are plotted as percentages.



PREQUENCIES

TABLE 4.55 (b)

RELEVANT STATISTICS OF GENERAL KNOWLEDGE SCORES OBTAINED

Group s	Mean	Median	Mode	SD	SK	ľur
					م بعدة النام عنه جرب 166 أخذة النام م	
Boys	71.32	71.30	71.26	17.91	0.003	0.298
Girls	72.56	74.83	79.37	10.63	-0.365	0197
			. الراق وذك منس معيد بريا "160 و160 وملة مساد ما		د خود چېږ ويو کو کاد دخه هور دند ور	ale out love -

The distribution of General Knowledge scores among boys and girls are almost normal. Girls distribution have negative skewness and the distribution of boys is positively skewed. Both the distributions are platykurtic in nature.

TABLE 4.55 (c)

PIDUCIARY LIMITS OF MEAN & SD OF SEX-WISE DISTRIBUTION OF GENERAL KNOWLEDGE SCORES OBTAINED IN SECOND SEMESIER EXAM FOR BOYS AND GIRLS

Group	SEM			. 95			,99			
	المراجعة والمراجعة والمراج	n apid regs water gaget when done sale were walls want to be		الله الله الله الله الله الله الله الله	لدينة ملك جروز برآما الرئية جانب هوات يدر					
Boys	1.26	68.84		73.81	68.05	***	74.60			
Birls	1.78	69.06		76.06	67.95	-	77.16			

TABLE 4.55 (c) - Contd.

and pril 100 mp 100 and pril	المن الله والله الله الله الله والله الله ال	计分类性 医性性 医甲基甲基 电线 医性性	*****	ما يُحْدُ فَيْنِهُ فَكُمْ يُكِمُ مُونِّ فِيْنِهُ فَيْنِهُ فَيْنِهُ فَيْنِهُ	e un mi em più au mi est pri	440 #W	वर्षेत्र सुद्धा करने पूर्वत करने प्रश्ना
Graup	BE of 9D			.95			.99
	الله الله في الله فإن الله أول الله إليا والله الله الله الله الله الله الله ال	tols and soft and titl they soft falls also	tan vyri tidy		में पात पांत होते होए पेक्ष पोट पोट होते.	and (40)	भी तक भग करें देश करें
Boys	.90	16.14	t=	19.67	15.58	r#	20.23
Girls	1.26	16.15	-	21.12	15,36	9 4	21.90
		و يون اين مين الله البار يون بين مين			مد زنان جو هاز مها الرب مثل من منا		

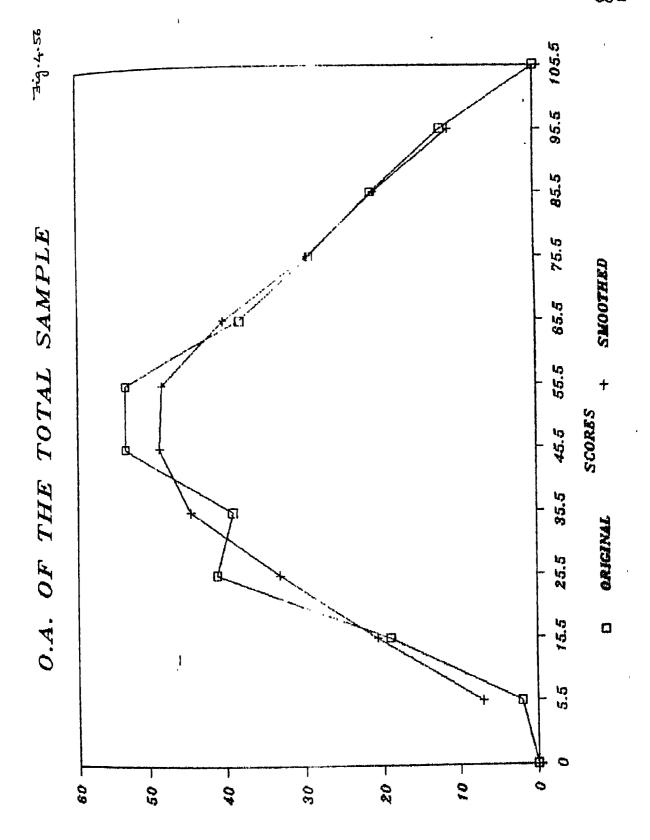
The .95 and .99 confidence limits for both the sexes in second semester exam have fairly narrow ranges, denoting the high dependability of these sample statistics.

TABLE 4.56 (a)

FOR THE TOTAL SAMPLE

هور هذه فيض ينجب عليان بيشت برهم نصب بيهم بينها يشان بانها جابل هي هي هي المن فيه يبي وي	NGC NGC 1964 NGC	
Scores	F	SMF
وي على الله الله الله الله الله الله الله ال	وه وهوا المواد	ه دون مید به در دون دید باید بیش بیش کنی و بیش کنی بیش کنی بیش کنی بیش دون کنی در به بیش دید دون دون دون
1 - 10	2	7.00
11 - 20	19	3.00
21 - 30	41	33.00
31 - 40	39	44.30
41 - 50	53	48.60
51 - 60	54	48.30
61 ~ 70	38	40.30
71 - 80	29	29.30
61 - 90	21	20.60
91 -100	12	13.60
	they was some head and may take the state and who	
Total	ВОЕ	
المن الله الله الله الله الله الله الله الل	হৈ। সংগ্ৰহ কুমান হামে এইবা আছে আলৈ আলৈ আলৈ ক্ষাণ চনাৰ মুখ্যা আৰু মুখ্যাই চাইট চনায় বিধান বিধান আমি চুক্তি কৰা	منية المالة المنت المنت المنا المنا المنا المنت ا

Figure 4.56 gives the original and smoothed frequency polygons of other activities scores for the total sample.



PREQUENCIES

1ABLE 4.56 (b)

RELEVANT STATISTICS OF OTHER ACTIVITIES SCORES

	نوبر میں بہار ھا۔ جب میں بہار میں بہار میں ہے۔ م	a bear fine and pair and specific and the sect of				
N	Mean	Median	Mod∉	SD	SK	Kur
	Mail Terr 642 mp 450 ml 1510 ml 150 ml	ng ang ang ang ang ang ang ang ang ang a	m y t ner men blir this me meit skep gi	10 mg v. 40 mg up go na ag y		
308	51.18	50.5	49.14	21.39	0.095	0.275
، شد مد مد می بند			-			

The scores of Other Activities are normally distributed in the total sample. The curve is positively skewed and is platykurtic in nature.

1ABLE 4.56 (c)

FOR THE TOTAL SAMPLE

Statistic	SE		.99				
والمراجعة المراجعة ا	er tak selek diapa hira dahan pas, santi pat ad paleb sel	المراجع والمراجع والمراجع المراجع المر		يعد المحادث ال			
Mean	1.22	48.79	- 53.57	48.04 - 54.33			
SD	0.87	19.70	- 23.09	19.16 - 23.63			
And the same and the same and the same and the same			و همية خيس بينيه وليد جيئة دوي مينة خيث العدد ب	ے بہا جے جب جہ جہ بعد جہ جہ جہ جہ چھ جاتے ہیں انہا جہ بہتے ہیں۔			

The .95 and .99 confidence limits for the Means and SDs of other Activities scores do not exhibit a wide range. This supports the normality of distribution and also the high degree of significance of the sample statistics.

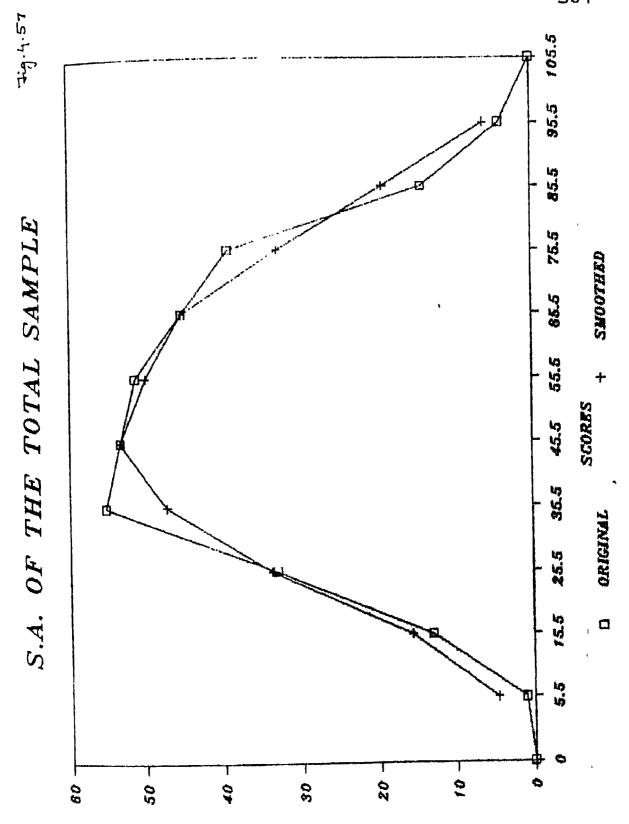
1981 4. 7 (a)

FOR THE TOTAL SAMPLE

			का कहा कहा होता नेवल करन करन करने हमें रेटन पेंड के प्रश्नाम होती हुए को से स्थाप के लिए होता करने करने हुए कर -	
Sc	ore	\$	ļ .	SMF
	س	. and 100 at 100 to	day area day dist been we say if you are by the period of the said Caber and Sade and Sade area said been distributed and said been distributed and said been distributed and said been distributed as the said said been distributed as the said said said been distributed as the said said said said said said said said	راه چې چې د د د ده چې چې چې چې چې د او د د د د د د د د د د د د د د د د د
1		10	1	4.60
11	ru.	20	13	15.60
21	vii	30	33	33.60
31	-	40	55	52. 30
41	-	50	53	53.00
51	_	60	51	49.60
61	-	70	45	45.00
71	-	80	39	32.60
81		90	14	19.00
91	_	100	4	6.00
			we are the best first that are	
			308	

Figure 4.57 gives the original and smoothed frequency polygons of "Self Attributes" scores for the total sample.





LEEGLENCIES

1ABLE 4.57 (b)

RELEVANT	STATISTIC	S OF	"SELF	ATTRIBUTES"	SCORES
	FOR 1	THE :	TOTAL	SAMPLE	

يجيد شده فقت بليس	۔ جب کے بنے کے بخر بنیز کی کہ فاتر	ور دست میں میں میں میں ہیں۔ ان میں ایک انہوں	ده هيون بيان دين دين ويون دين ويون ويون ويون ويون	*** *** *** *** *** *** *** ***	_ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
N	Mean	Med 1 an	Mode	SD	SK	Kur
	ه فرس بيس هند جن عند خلو فاه سي مهم	والكاف من مادي مادي والمناس من من المناس	na. Iyan nan disir dige ann ann desi gas gay a			
308	51.02	50.31	48.90	19.17	0.111	0.292
						ندي دميا خيره جيب الله البيو طرق ا

The scores of "Self Attributes" for the total sample are distributed fairly normally. The skewness is positive and is platykurtic in nature.

TABLE 4.57 (c)

FIDUCIARY LIMITS OF MEAN & SD OF "SELF ATTRIBUTES" SCORES FOR THE TOTAL SAMPLE

	***	وية جمية خديد حسمة خليفة حسم بديدة خرسم حياية	~~~	با حويد الله بالله مديد يبيك وهاه بيزوه على غيري عامل .			~~~~	
Statistic	Statistic SE			.75			. 99	
The real rate case with their right play that their says made in	ها حلت واره بالله بالله وي بيان حال أمارًا الله	The State State which have send shop the same		ه المن يشير هيان فين البيان المن عند يشير المن المن المن المن المن المن المن المن	*			
Mean	1.09	48.88	**	53.16	48.20	_	53.84	
SD	0.78	17.45	***	20.69	17.17	-	21.17	
منية بالجراجات المنا المنا شناة الله المنا بالما المنا				n sidel quiga chay, only white while phon which reigh below to				

The .95 and .99 confidence limits for the Means and SDs of Self Attributes scores for the total sample have very narrow ranges. This implies the dependability of the sample statistics as true measures.

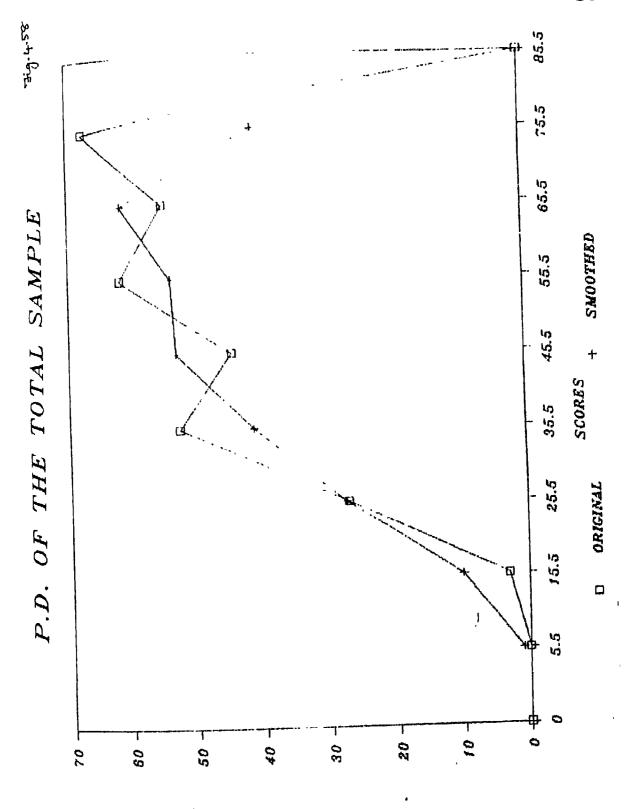
TABLE 4.58 (a)

DISTRIBUTION OF PERSONAL DATA SCORES

FOR THE TOTAL SAMPLE

···	pag ==-	100 Mg day 100.	والله المقا ملك المتاركة والله المتاركة والله المتاركة والله المتاركة والله المتاركة والمتاركة و	يات مين على مين الله عليه الله عليه والله عليه الله عليه الله عليه الله عليه الله الله الله الله الله
Sca	res		F	SMF
عد جريم	·-	1964 aller 1986 Pari	nail gay tam ring talk tap sjill tald had still yor ark tale. I det der jam finn tam dipt mit dom lige tilm bet den fijn min tam yan tijd t	حالة مثلاً أحد الله كاف هذا الله علي الدن يورة وول بيند زوار يون دور هذر بينه بدن هذر الله حدر الله
1		10	0	1.00
11	_	20	3	27.30
21	-	30	27	27.30
31	-	40	52	41.00
41	_	50	44	52.30
51	-	60	61	53.00
61	~	70	54	60.60
71	**	80	67	40.30
			और कु हालार प्रमुख स्थापन न्यापन स्थापन हांग्युचे स्थापन स्थापन स्थापन	
	ומד	'AL	308	ينت عند مدد مدد ميد عدد الله

Figure 4.58 gives the original and smoothed frequency polygons of Personal Data scores for the total sample.



LEEGUENCIES

1ABLE 4.58 (b)

RELEVANT STATISTICS OF PERSONAL DATA SCORES FOR THE TOTAL SAMPLE

"	نگ کت کت بالا محالت هم نیم نیم ر	ه جدم الله عبد حيث جيت شين لمنه نهي يمن	ور عدد من بنيه سنة کدر مدر کيا بحد دي			
N	Mean	Median	Mode	SD	SK	Kur
		و منه جمل بيده جمل ميد جمل ميد بيد ويد	* البيد 60 مانه مانه مين 60 مانه ميد وله ش		********	
308	53.78	55.09	57.71	16.67	-0.236	0.322

The Personal data scores for the total sample are fairly normally distributed. The skewness is negatively curved and is platykurtic in nature.

1ABLE 4.58 (c)

FIDUCIARY LIMITS OF M & SD OF PERSONAL DATA SCORES FOR THE TOTAL SAMPLE

به کورد کیا کما خیر بلک کله نیب بین وی کما جیا پین							
Statistic	5E.	.95			. 99		
Mean	0.95	51.92	_	55.64	51.33	~	56.23
SD	0.67	. 15.35	~	17,99	14.93	-	18.41
و نماز جدم دور کار کار کار کار کار کار کار کار کار کا							

The .95 and .99 confidence limits for the Means and SDs of Personal Data scores for the total sample have narrow ranges implying the dependability of sample statistics as true measures.

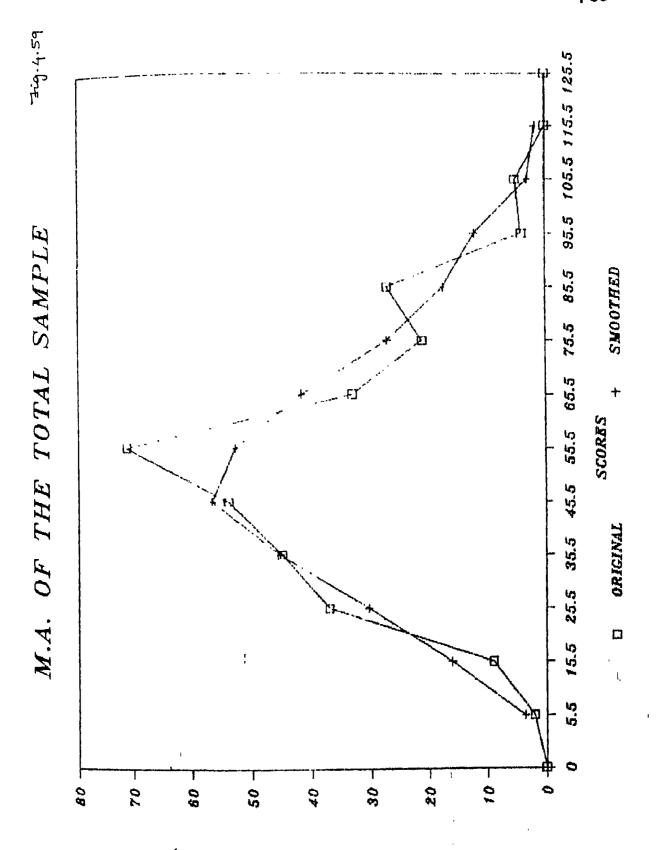
TABLE 4.59 (a)

DISTRIBUTION OF "MENTAL ABILITIES" SCORES

FOR THE TOTAL SAMPLE

يون مناه المنا الله المناه المنا المنا المناه المنا	ayda rifey ini, a disk işşa ilgan sidni asan mala sişa sidla qada basa silan mala gada başa n	الله الله الله الله الله الله الله الله
Scores	F	SMF
ومن ويش ويش وين هذو شمخ ويان هي ويو وي وي هي هي وي	لل بالله بيان الله الله بأنه شدة كم وقو وله الله الأله الله الأله الله الله الله	يميد ميرد ميود نيود نيود بهيد مورد يوليد كالآل خاك بالآل كالد يولي عليه باميد ميود بيمد ميد يوم بيممذ
1 - 10	2	3.60
11 - 20	9	16.00
21 - 30	37	30.30
31 - 40	45	45.30
41 - 50	54	36.60
51 - 60	71	52.60
61 - 70	33	41.60
71 - 80	21	27.00
01 - 90	27	17.30
91 - 100	4	15.00
101 - 110	5	3.00
111 - 120	0	1.60
	्र तका क्षेत्र वेत्रक क्षण क्षण प्राप्त प्रोप्त संस्थित स्थान	
	308	وي المراجعة والمراجعة المراجعة المراجعة المراجعة المراجعة المراجعة والمراجعة المراجعة المراجعة المراجعة المراجعة

Figures 4.59 gives the original and smoothed frequency polygons of Mental Abilities scores for the total sample.



LBRONENCIE2

TABLE 4.59 (b)

RELEVANT STATISTICS OF MENTAL ABILITIES SCORES FOR THE TOTAL SAMPLE

Per 200 100 100 100 100 100 100 100 100 100		ال يجمل البيان المناف المناه شهيم هجم المناف المناف المناف المناف	ور هنده ومين درس جوب ميت والله الله الله الله والله الله الله والله الله			
N	Mean	Median	Mode	SD	SK	Kur
		ما چندان میداد کیلید میدان میداد میداد میداد داشت میداد	und hand best high while sold, state General bear high stag	ه دیده دیده میش شده میش مدد دید.		
308	52.12	51.49	50.21	20.35	0.093	0.243
ہ درت جے رسو کیا ہے کندر ہیں		nderstand of the second of the second of		· · · · · · · · · · · · · · · · · · ·		

The distribution of Mental Abilities scores for the total sample are almost normal. The skewness is positive and is leptokurtic in nature.

TABLE 4.59 (c.)

FIDUCIARY LIMITS OF MEAN & SO OF MENTAL ABILITIES SCORES FOR THE TOTAL SAMPLE

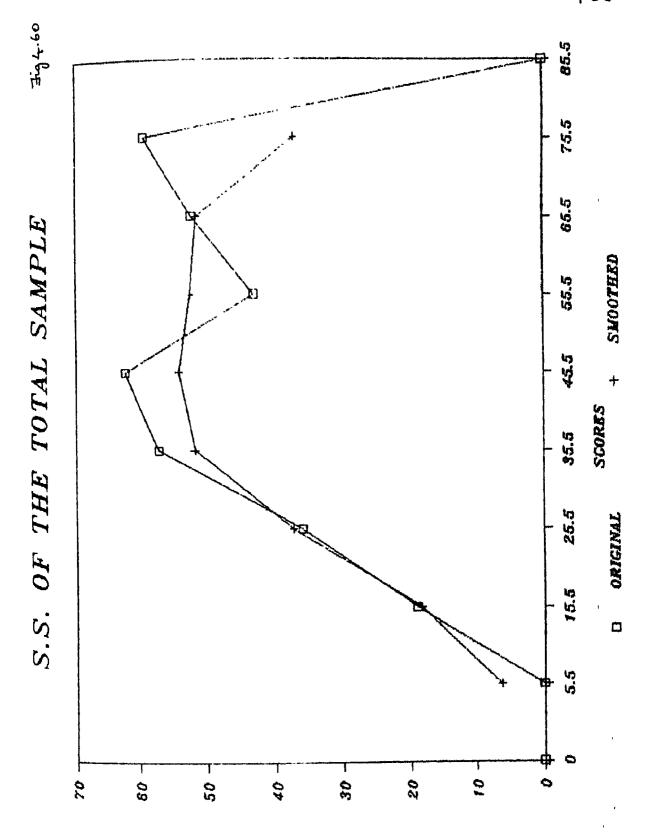
the of it and fille state to be built alice of type and take	PRESENT MAN SHE SHE PAR SHOW IN THE PARTY AND	to him the book rips about the st light held dellik bein					
Statistic	SE		.9	5		. 99	ı
THE POT MAY THE BUILDING THE PART AND THE PA		المرا مواله عالم المام المام المام المام عالم المام المام المام المام المام		يونه مين بين الله وي الله الله الله الله الله الله الله الل	عند پای چها دیا کی کند دید پیپ		
Mean	1.16	49.85		54.40	49.13	_	55.11
SD	0.83	18.73		21.96	18.22	-	22.47
جميره حجمه مخلف فرفيد مهجي بالملك إحميل جيفته يجهز حجبه يقمي بيشت		ے بات کے ایک کیے ہوا۔ بہت پیدا سرم سرم سے سے					~~~~~~

The .95 and .99 confidence limits of the Mental Abilities scores for the total sample have fairly narrow-ranges, denoting the high dependability of these sample statistics.

FREQUENCY DISTRIBUTION OF SOCIAL SKILLS SCORES
FOR THE TOTAL SAMPLE

ىبى من يىن	445 Fred 1000	करने जानों क्षण प्रकार तथा उनके क्षण ब्याव प्रमुख केंग्री करण वर्तन क्षण रूपे तथा प्रकार प्रकार प्रकार प्रकार	(٢٠ - ١٩٥٥ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ - ١٩٥١ -	
Sc	ore	\$	F	SMF
		हुंका क्षेत्र केंग्र क्षण केंग्रि प्रथम प्रथम प्रथम क्षण क्षण क्षण क्षण प्रथम प्रथम केंग्र क्षण का क्षण क्षण क	يمة فها على الله الله الله الله الله الله الله ال	
i	-	10	0	6.30
11	-	20	19	18.30
21	-	30	36	37.30
31	-	40	57	51.60
41	_	50	62	54.00
51	-	60	43	52.30
61	-	70	52	44.60
71	-	80	39	44.60
		***	الله الله الله الله الله الله الله الله	
			308	

Figure 4.60 gives the original and smoothed frequency polygons of social skills scores for the total sample.



FREQUENCIES

TABLE 4.60 (b)

RELEVANT STATISTICS OF SOCIAL SKILLS SCORES

		ge ander mennen Melle aus varie deren eine gebe	र में नर्ग का वी लोग स्थिती करणा केवा बहु।			
N	Mean	Median	Miad e	as	SK	Kur
	化乙基 医电子性 医神经性 化化 医水 医二元二十二	. महास्था स्थापना स्थापना स्थापना । इस्ता स्था स्थापना स्थापना स्थापना । इस्ता स्थापना । इस्त	भारति कि वर्षा क्षित्र के लोगा समीव व्यवस्था		خط الله عليه دين عن الله عليه عليه عليه	
308	48.03	47.27	45.76	17.60	0.129	0.295
		manurum Marants sur	THE ST. CO. LEW THE P. P. LEWIS CO.			

The distribution of social skills scores among the total sample of children is near normal. The distribution is positively skewed and is platykurtic.

TABLE 4.60 (c)

FIDUCIARY LIMITS OF MEAN & SD OF SOCIAL SKILLS SCORES FOR THE TOTAL SAMPLE

the date will below divine spread bloom doo's floods (total or and of 18 s.)							
Statistics	SE"		. 9	5		.99	
ور حيواً. الحام الله الحدو الحرب والله الوائد الدائد الدائد الوائد الجام الحام الحام الحام الحام الح		ينها الده المنز على المدرية ينما يرس و		100, and 100 year 100 Top 100 PM		-	
Mean	1.02	46.07		49.99	45.44		50.62
SD	0.71	16.21	_	18.99	15.76	-	19.44
are any fare and said only only they also also have being large and with the	n lana tana eng agar - ng Alla (dari rejin 18-18 sa sa			بنياء على برند دود رسم مرن مين بيت	****		. and said skel skell same to a

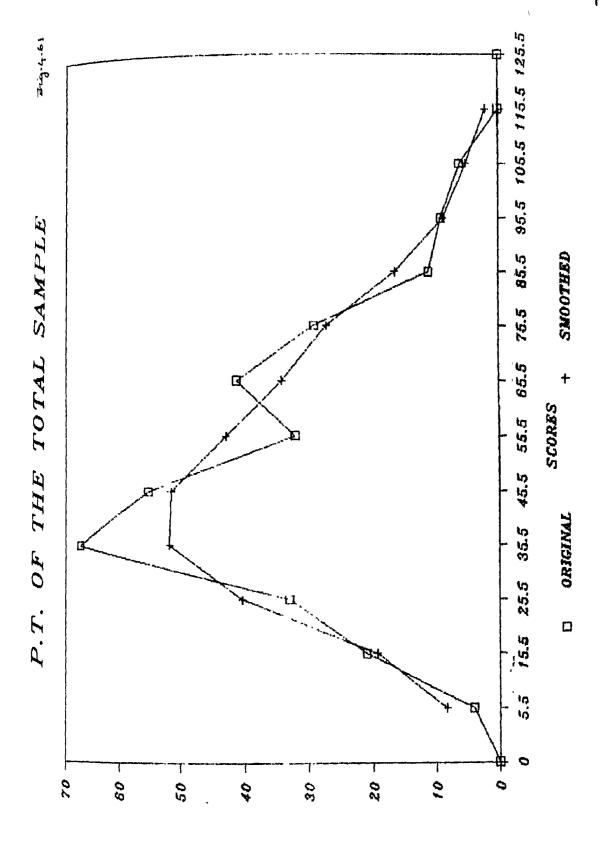
The .95 and .99 Fiduciary intervals of Means and SDs of Social Skills scores among the total sample of children do not vary broadly, implying a high dependability of the sample statistics as true measures.

DISTRIBUTION (M. PERSONALITY TRAITS SCORES

TABLE 4.61 (a)

कुल को केल स्कूल कुल कुल करने केली करने करने करने करने करने कुल के स्कूल करने सुनन करने स्कूल है की अपन करना	هند هند هند هند هند مند امن امن البدر عند البدر عند البدر عند البدر عند البدر البدر البدر البدر البدر البدر ال	. साथ त्यारं राज्य —पात कोर्स साथ पहुल गाँक संस्तु त्यारं प्रस्त संस्तु तेसा संस्त्र प्राप्त संस्त्र प्राप्त स
Scores	F	SMF
والمراجعة والم والمراجعة المها فيها فيها فيها أنها أنها أنها في حثوا والم المراجعة والمراجعة والمراجعة والمراجعة	یک اینده کی سے سے بیدہ کی جی افغا سے میٹر میں اسے جید بعد، جید بھی بہت میں بیدہ بین ، میر ا	
1 - 10	4	6.30
11 - 20	21	19.30
21 - 30	33	40.30
31 - 40	67	51.30
41 - 50	55	42.60
51 - 60	32	27.00
61 - 70	41	27.00
71 - 80	29	16.30
81 - 90	11	13.00
91 - 100	9	8.60
101 - 110	6	5.00
111 - 120	0	2.00
	अपन करून काम पानु प्रतिन स्थाप केली केली	
	308	

Figure 4.61 gives the original and smoothed frequency polygons of personality Traits scores for the total sample.



FREQUENCIES

TABLE 4.61 (b)

RELEVANT STATISTICS OF PERSONALITY TRAITS SCORES FOR THE TOTAL SAMPLE

		<u>بري ميدا جنب ساة الفاة اليب الفاة الله بحد الما الما الما الما الما الما الما الم</u>				
N	Mean	Median	Mode	SD	SK	Kur
	. جند ميد جند مند يند يند بيد ديد			. بيسم ومنه فيده منته هيدا عند عدد عدد		
308	49.20	45.77	38.92	21.95	0.469	0.281
				. نيے وين بين علد نين عبد عدد عدد مدد		

The distribution of Personality Traits scores for the total sample is normal with a slight variability. The curve of the distribution is positively skewed and is platykurtic in nature.

TABLE 4.61 (c)

FIDUCIARY LIMITS OF MEAN & SD OF PERSONALITY TRAITS SCORES

FOR THE TOTAL SAMPLE

Man den den man Mill ofte dem siles dem man son dent 7000 .			10 44 8140 804		ماد حدد جادر الله وداي بياد حدد بدده هيد		
Statistics	SE		. 9	5	•	99	
although the tips take althy only spain time that this tire pure	क्षेत्र र स्थान स्थान स्थान होती. इत्यंत्र प्रतान स्थान स्थान स्थान स्थान	المن والله والله والما والله والله المناه المناه والما والمناه		على وسن مرث بسن فين فين مرت عدد م			
Mean	1.25	46.75		51.65	45.97		52.43
SD	0.89	20.21	•••	23.69	19.66		24.24
***************************************						<u></u>	

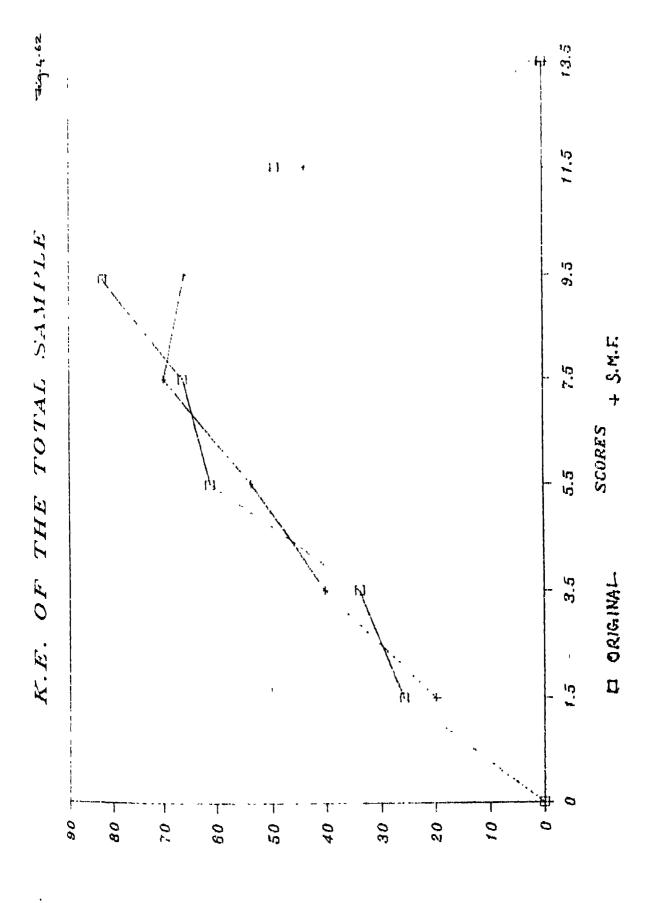
The .95 and .99 confidence limits for the Means and SDs of Personality Traits scores for the total sample do not vary widely thus indicating a high degree of significance of the sample statistics.

TABLE 4.62 (a)

FOR THE TOTAL SAMPLE

No. 100, 100, 100, 100, 100, 100, 100, 100	त्र कुमा क्षेत्र प्राप्त प्रति प्रति अन्य कुमा पीती प्राप्त व्यक्ति प्रति प्रति प्रति क्षेत्र कुमा कुमा प्रति व व	سد فيد في في ها فك إما أنت أون أن فك هك ها فاي أن أوا إنام وي أم أم أوا وي
Scores	ja. 	SMF
1 - 2	26	20.00
3 - 4	34	40.30
5 - 6	61	50.30
7 - 8	56	66.30
9 - 10	82	62.30
11 - 12	49	43.60
	-04 at 000 and 000	
TOTAL	308	

Figure 4.62 gives the original and smoothed frequency polygons of Knowledge of English scores for the total sample.



EREQUENCIES

-

TABLE 4.62 (b)

FOR THE TOTAL SAMPLE

	, — — — — — » — »	به رحبه مید سید جس بید سید خبید بسید د		المناور		
N	Mean	Median	Mad€	SD	SK	Kur
~~~~		بريون الدر سيد بلب علله عملو مين جيد جيد يورو ي		r palm gann digin liben dalah sesan asah dalah te	ب الله الله ولا الله الله الله الله الله	
308	7.32	7.68	8.39	3.03	-0.356	0.281

The distribution is near normal and negatively skewed. The curve is platykurtic in nature.

TABLE 4.62 (c)

# FIDUCIARY LIMITS OF MEAN & SD OF K.E. SCORES FOR THE TOTAL SAMPLE

		~ \$14 to 1000 and only 1000 and 1000	-				
Statistic.	SF	•	95		.9	9	
	بوعد موروسه معاديور	to a last on the same and and and and			hile and you the title that the gar		
Mean	0.17	6.79	<b>LE</b> FI	7.66	6.88		7.77
SD	0.12	2.79	****	3.27	2,71	•	3.35
ي بيو. سد مد بيد دي سه لي باد دي مد سه مد					مة البد عبد جود شاة القواجيم الله عبد عبد سيه		

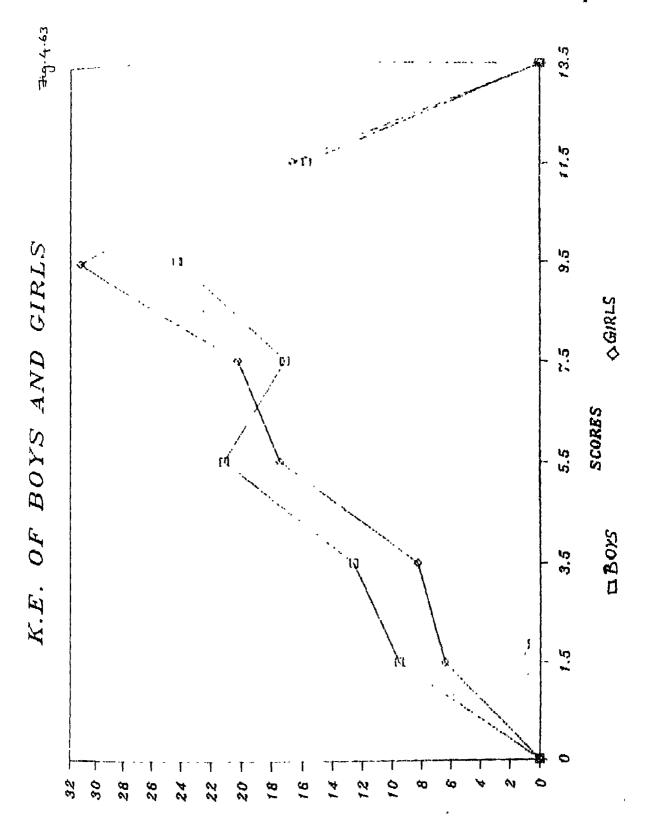
The .95 and .99 fiduciary intervals of the mean and SD of K.E. scores for the total sample are fairly narrow in their ranges. This signifies that the estimated statistics are dependable as true measures.

TABLE 4.63 (a)

# SCORES FOR BOYS AND GIRLS

ه و سرح بوجه و مواد نمون مواد مواد است داخل است هما هما هما هوا مواد المواد الم				A ME TO THE THE THE STEEL COLUMN TWO DAYS THE STEEL COLUMN THE COL	ک ^{ا برند} کاپ
Sca	ref	5		Boym F X	Girls F X
1	, ,	2	follows from their teats and and and an a jour maje de-	9.55	6.42
3	_	4		12.57	8.26
5	-	6		21.11	17.43
7	•	8		17.09	20.18
9		10		24.12	31.19
11	-	12		15.58	16.51
	- راب جد ا	، سعد بنيد دهد ج	الله المراجعة	يندن ميدون المام المام الرام المام الم	ود دعات شدند ميدا ديون چين شوي شون کيان شوان واري ديان ديان چين ديان ديان ديان ديان ديان ديان ديان دي

Figure 4.63 depicts the distribution of Knowledge of English scores for boys and girls in the form of frequency polygons. The frequencies are plotted as percentages.



LEBOURNCIES (%)

RELEVANT STATISTICS OF K.E. SCORES
FOR BOYS AND GIRLS

Mean	Median	Mode	SD	SK	Kur
7.11	7.29	7.67	3.10	-0,174	0.286
7.72	8.27	9.38	2.86	-0.577	0.270
	Mean 7.11 7.72	Mean Median 7.11 7.29	Mean     Median     Mode       7.11     7.29     7.67       7.72     8.27     9.38	Mean         Median         Mode         SD           7.11         7.29         7.67         3.10           7.72         8.27         9.39         2.86	Mean         Median         Mode         SD         SK           7.11         7.29         7.67         3.10         -0.174           7.72         8.27         9.38         2.86         -0.577

The distributions of K.E. scores among the Boys and Girls are near normal. The polygons have negative skewness and both have platykurtic distribution.

FIDUCIARY LIMITS OF MEAN & SD OF K.E. SCORES
FOR BOYS AND GIRLS

SE OF SD  Boys 0.16 2.79 - 3.40	2.70 - 3.50
SE OF SD	
Girls 0.27 7.18 - 9.26	7.01 - 8.43
Boys 0.22 6.68 - 7.54	6.54 - 7.67
Group SEM .95	<ul> <li>ا بدء مسا سند سند منید مید مید امو کیدو پیدو بورد پردو برد.</li> </ul>
Group SEM .95	.99

The fiduciary limits of mean and SD for the K.E. scores of both the sample i.e. Boys and Girls have fairly narrow ranges. This indicates that the population parameters are fairly dependable as true measures.

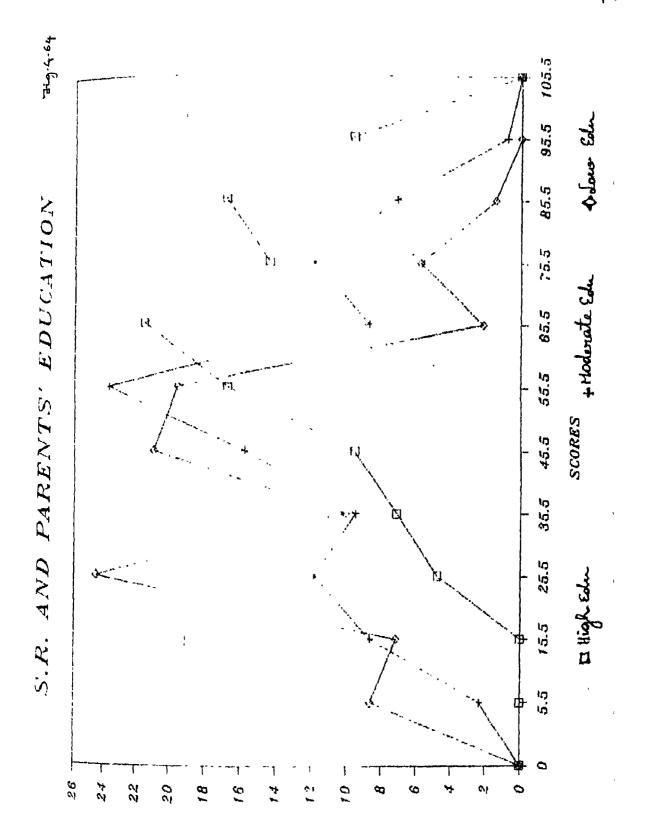
## S.R. AND HOME BACKGROUND

TABLE 4.64 (a)

## THE BASIS OF EDUCATION OF PARENTS FOR THE TOTAL SAMPLE IN PERCENT FREQUENCIES

Sca	ores Ec		Highly Moderately Educated Educated % F % F		Education % F	
		10	o	2.36	8.63	
11	~	20	U	8.66	7.19	
21	-	30	4.76	11.81	24.46	
31	_	40	7.14	9.45	10.07	
41		50	9.52	15.74	20.86	
51	-	60	16.66	23.62	19.42	
61		70	21.43	8.66	2.15	
71	-	80	14.28	11.81	5 . 75	
81	-	90	16.66	7.08	1.43	
91		100	9.52	0.78	o	

Figure 4.64 depicts the distribution of scholastic Readiness scores on the basis of Education of Parents for the total sample in the form of frequency polygons. The frequencies are plotted as percentages.



EFECTIONALIES (%)

RELEVANT STATISTICS OF SCHOLASTIC READINESS SCORES AND
EDUCATION OF PARENTS FOR THE TOTAL SAMPLE

TABLE 4.64 (b)

ي وسيد جديد ويلك هيئة ويدي ليجو هيئة ويدأو		من مناه الله الله الله الله الله الله الله ا	اسمد بانی میژن سیاد نوی بینی داند.			
Group <b>s</b>	Mean	Median	Mode	SD	SK	Kur
ه کیا ختر اللہ وہ 34 شد دی کہ ند		و بيون وله وه دم هميه خون واله واله همية و	مهي ولك حدد عنها مواد المدد عدد حدد سلط المدد			
Highly Educated	65.5	66.05	67.17	19.02	-0.087	0.272
Moderately Educated	49.51	51.33	54.97	21.30	-0.256	0.265
Low In Education	38.66	40.14	43.09	19.15	-0.232	0.295

The scores of Scholastic Readiness are almost normally distributed in the different groups of "Education of Parents". All the curves are negatively skewed and are platykurtic.

TABLE 4.64 (c)

FIDUCIARY LIMITS OF MEAN & SD OF SCHOLASTIC READINESS

SCORES ON THE BASIS OF EDUCATION OF

PARENTS FOR THE TOTAL SAMPLE

		گاران کاک مانگ خوب کاک مانگ برای بیده چون خون به به بیدر نصر خوب برین نصر خوب برین میده سمر .	جات به المساحب الله بناء بناء بينا الها الله الله بالله فيان الله الله الله الله الله الله الله ال
Group	SEM	. 95	.99
Highly . Educated	2.93	59.74 - 71.25	<b>57.92</b> - 73.07
Moderately Educated	1.89	45.81 - 53.22	44.63 ~ 54.39
Low in Education	1.62	35.48 - 41.85	34.47 - 42.85

TABLE 4.64 (c) - Contd.

gai lair sign sign day that man hair bail day h	발 神経 地區 내용 위한 원칙 보석 구석 기업 안	ير بين ليها نجوا جن حص الحد عليه كان ألف خيل أسن بإنها الحد عليم خرار در	الله يقول الله الله الله الله الله الله الله ال
Group	SE OF SD	. <b>95</b>	.99
High in Education	2.08	14.94 - 23.1	13.65 - 24.40
Moderate in Education	1.34	18.67 - 23.94	4 17.84 - 24.77
Low in Education	1.15	16.89 - 21.4	1 16.17 - 22.13
		ين من الله الله الله الله الله الله الله الل	

The .95 and .99 confidence limits for the Means and SDs of Scholastic Readiness scores in the different groups of "Education of Parents" exhibit slightly wide ranges with "High Group" varying more than the other two.

DISTRIBUTION OF SCHOLASTIC READINESS SCORES ON THE

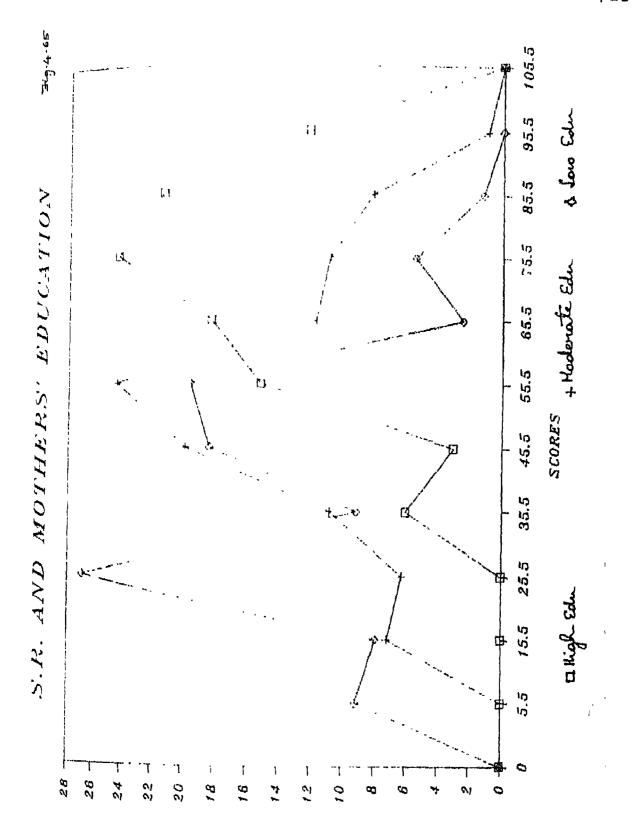
BASIS OF MOTHER'S EDUCATION FOR THE TOTAL

SAMPLE IN PERCENT FREQUENCIES

TABLE 4.65 (a)

apr ***	1974 ACC 41		y (마마 스타마 ) 현대 10년	و عدور ويدور ميدور ويون ويون ويدور ويد	يمد فيد بسر بندر كالديمة، يبيه مييه سنة للله بإلاد طبال الله الله ته
Scores			High In Education	Moderate In Education	Low In Education
i		10	0	0	9.14
11	-	20	0	7.21	7.92
21	44	30	0	6.30	26.83
31	-	40	6.06	10.81	9.14
41	~	50	3.03	19.82	18.29
51	•	60	15.15	24.32	19.51
61	_	70	18.18	11.71	2.44
71	***	80	24.24	10.81	5.48
81	-	90	21.21	8.11	1.21
91	-	100	12.12	0.90	O

Figure 4.65 shows the distribution of Scholastic Readiness scores on the basis of Mother's Education for the total sample in the form of frequency polygons. The frequencies are plotted as percentages.



EBROUENCIES (%)

NABLE 4.65 (b)

RELEVANT STATISTICS (IF SCHOLASTIC READINESS SCORES AND MOTHER'S EDUCATION FOR THE TOTAL SAMPLE

يادر بالله في هند من منه منه حبر 30 كم 30 كم الله							
Group	Mean	Median	Mode	SD	SK	Kur	
		ه منز 🚥 باله ليه دين بند. شپ ويو ن	en den een een an de ske ske e		·		
High In Education	71.86	73.62	77.14	16.10	0.328	0.285	
Moderate In Education	52.70	52.90	53.30	19.22	-0 031	0.230	
Low In Education	37.75	37.16	35.98	19.29	0.092	0.798	

The distribution of Scholastic Readiness (correspondence almost normal in the different groups of Mother's education. Excepting in the low group which is positively skewed the other two are negatively skewed.

FIDUCIARY LIMITS OF MEAN & SD OF SCHOLASTIC READINESS

SCORES ON THE BASIS OF MOTHER'S EDUCATION

FOR THE TOTAL SAMPLE

170 Pin 150 pile 150 pin 160 mil 160 m					
Group	SEM		95		99
High In Education	2.80	66.36	- 77.35	64.62	- 70,119
Moderate In Education	1.82	49.13	- 56.28	47.99	- 57.41
Low in Education	1.50	34.80	- 40.70	48.22	- 41.64

TABLE 4.65 (c) - Contd.

المن سود نود من فيه شو شو المدارية المراجع الم	وهو الله فلا يقال الله الله الله الله الله الله الله ا	ng the saft saft tills from first saft dath som toph stop (this bade maps toph goap away assignment	المن موند عمل فيها بعد بعدة بعدة عليه عدد معنا شهر جعد موند عمد عبد العد ماند
Group	SE OF SD	. <b>75</b>	. <b>499</b>
High In Education	1.99	12.20 - 20.01	10.97 - 21.24
Moderate In Education	1.29	16.68 - 21.76	15.88 - 22.56
Low In Education	1.06	17.19 - 21.39	16.53 - 22.05
		· · · · · · · · · · · · · · · · · · ·	of days was from now daily they got also also and now does one not says you. As we

The .95 and .99 confidence limits for the Means and SDs of Scholastic Readiness Scores in the different groups exhibit wide range. This could be because of the smallness of the sample.

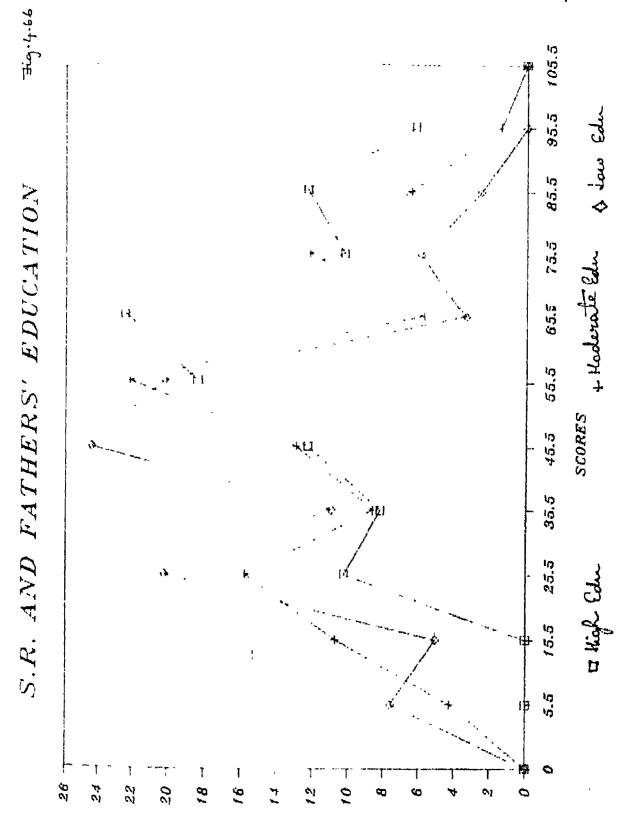
DISTRIBUTION OF SCHOLASTIC READINESS SCORES ON THE

## BASIS OF FATHER'S EDUCATION FOR THE TOTAL SAMPLE IN PERCENT FREQUENCIES

TABLE 4.66 (a)

Scores			Education		Low In Education	
		10	0	4.29	7.56	
1 1	***	20	0	10.71	5.04	
21	<b>*</b> P	30	10.70	15.71	20.17	
31	_	40	8.16	8.57	10.9.	
1	_	50	12.24	12.86	24.36	
51	-	60	18.37	22.14	20.17	
51	-	70	22.44	5.71	3.36	
71	-	80	10.20	12.14	5.88	
31		90	12.24	6.42	2.52	
71	-	100	6.12	1.43	o	

Figure 4.66 presents the distribution of Scholastic Readiness Scores on the basis of Father's Education for the total sample in the form of frequency polygons. The frequencies are plotted as percentages.



CHEGARNCIES (#)

RELEVANT STATISTICS OF SCHOLASTIC READINESS SCORES
AND FATHER'S EDUCATION FOR THE TOTAL SAMPLE

** ** ** ** ** ** ** ** ** ** ** ** **					*****	
Group	Mean	Median	Mode	SD	SK	Kur
High In Education	59.99	60.95	62.88	19.69	-0.146	0.246
Moderate In Education	46.86	48.83	52.78	22.97	-0.258	0.277
Low In Education	41.29	43.08	46.66	19.16	-0.279	0.270
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~					~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	

The distribution of Scholastic Readiness scores, father's Education-wise, are near normally distributed. The distributions are negatively skewed. The distribution of High In Education is leptokurtic and the other two are platykurtic.

TABLE 4.66 (c)

FIDUCIARY LIMITS OF MEAN & SD OF SCHOLASTIC READINESS SCORES

AND FATHER'S EDUCATION FOR THE TOTAL SAMPLE

Group	SEM	.95			•	99
High In Education	2.81	54.74 -	65.50	52.73	<u>-</u>	67.25
Moderate In Education	1.94	43.05 -	50.66	41.85	-	51.86
Law In Education	1.75	37.85 -	44.74	36.76	~	45.83

TABLE 4.66 (c) - Contd,

يان باي وله جم هم الله الله الله الله الله الله الله	بين بين هم مين بين شر بين بان بان بان	ama dipar ingal Maya Mara yiPa siAP 19-00 pina diger	1475 244 646	ينب چال کيل خيار خيار ديد	پرية پياد کال کارا باش مده ۱۹۰۰ کال	## res ~~	
Group	SEM		5	²⁵ May 1879, spr. spr. skee 1901 Ske		.9	9
High In Education	1.99	15.78	-	23.61	14.54	•	24.85
Moderate In Education	1.38	20.26	-	25.67	19.41	•	26.52
low In Education	1.24	16.71	48.5	21.60	15.94	-	22.30
- 第二指示:		والمراجع من مناه الله عند الله الله الله الله الله الله الله الل				بشو ملت امن ا	

The .95 and .99 confidence limits for the Means and SDs of Scholastic Readiness scores and Father's Education have narrow ranges, implying that the sample statistics are dependable.

SCHOLASTIC READINESS AND OCCUPATION OF MOTHERS

TABLE 4.67 (a)

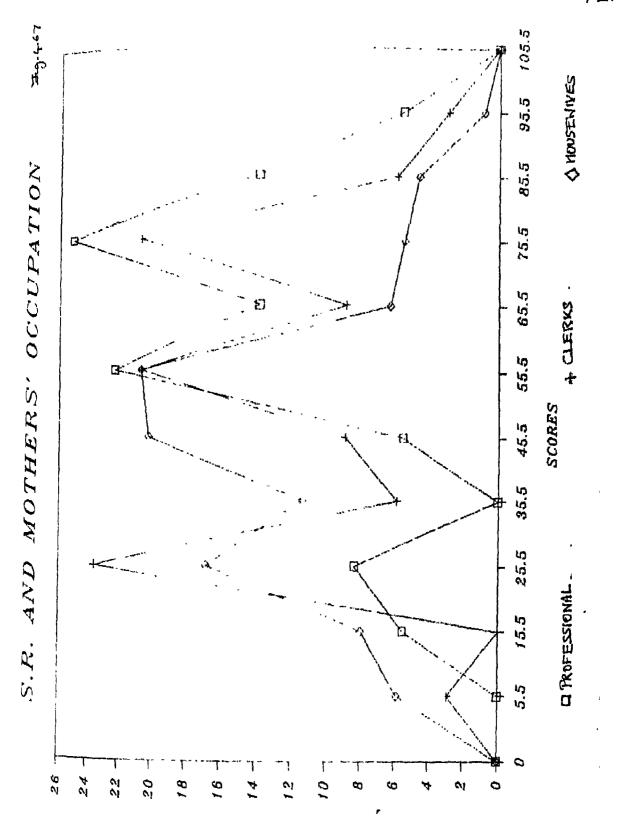
DISTRIBUTION OF SCHOLASTIC READINESS SCORES ON THE

BASIS OF OCCUPATION OF MOTHERS FOR THE TOTAL

SAMPLE IN PERCENT FREQUENCIES

Sca			HouseWives % F	Clerk % F	Professional % F
1	2/2	10	5.88	2.94	o
11	•	20	7.98	0	5.55
21	-	30	16,80	23.52	8.33
31	**	40	11.34	5.88	o
41	***	50	20,16	8.88	5.55
51	***	60	20.58	20.58	22.2
61	~	70	4.30	8.82	13.8
71	••	80	5.46	20.58	25.00
61	•	90	4.62	5.88	13.80
91		100	0.84	2.94	5.55

Figure 4.67 depicts the distribution of Scholastic Readiness scores and Occupation of Mothers for the total sample in the form of frequency polygons. The frequencies are plotted as percentages.



EREGUENCIES (%)

TABLE 4.67 (b)

RELEVANT STATISTICS OF SCHOLASTIC READINESS SCORES

AND OCCUPATION OF MOTHERS FOR THE TOTAL SAMPLE

					ت بوقه وسه خوات ترون بها جاری سال مدی جد	
Group	Mean	Median	Mode	SD	SK	Kur
				7 <u>10 (10 (4) 14</u> 16 (4) 40 40 40	ب بعد مان جون وبل وقد حود کات نعب الناه ب	
Housewives	43.48	44.45	46.40	20.74	-0.141	0.261
Clerk	52.85	54.78	58.65	22.40	-0.258	0.378
Professional	63.00	66.5	73.5	20.99	-0.500	0.205

The distributions of Scholastic Readiness scores and occupation of mothers for the total sample is almost normally distributed. The distributions are negatively skewed. The distributions of the 1st and 3rd group are leptokurtic, while that of the 2nd group is highly platykurtic.

FIDUCIARY LIMITS OF MEAN & SD OF SCHOLASTIC READINESS SCORES

AND OCCUPATION OF MOTHERS FOR THE TOTAL SAMPLE

-								
Gr	oup	SEM	. 95		.99			
44 4	وران بازدند خانم جاره دون دونه داران داران دونا داران دار	ب فالله عبد وفق سبه حبوب مود بيته بيش فالله ا			جن کیل شور سے براہ کی ایک ایک دیک ہیں۔	** ** *** ** **		
Нс	DUSEWIVES	1.34	40.84	***	46.11	40.01		46.95
Cì	lerk	3.84	45.32		60.38	42.94	-	62.76
Pr	rofmemional	3.49	56.14	-	69.65	53.97	-	72.02
	P 1850							

TABLE 4.67 (c) - Contd.

医甲基苯甲基苯甲甲基甲基甲基	, कोई सुंबंद क्ष्मुं कीई स्थित करन और देखा गोहर कीई	·····································	من چون مید ها هی خون باید ها چین باید ها باید ه
Group	se of 60	. 95	.99
心可性的 医性神经 医乳球 经有		·····································	ين المار والمراسية الحد مثلة التور بقوز يان إنهاء إنقار المرا التور حدو الحد المرا
Housewives	0.95	18.87 - 22.61	18.28 - 23.20
Clerk	2.72	17.05 - 27.74	15.36 - 29.43
Professional	2.48	16.12 - 25.86	14.59 - 27.41
	يت الله جمر يك شار يين ويو جي ي ن ي ويو.	나는 수학 등에 따라 하면 하는 것이 있다. 그는 것이 되는 것이 되는 것이 있는 것이 있다.	NG NG (축구 하지 시점 (지금 100 NG) 1840

The .95 and .99 confidence limits for the Scholastic Readiness scores and occupation of mothers for the total sample do not exhibit narrow ranges. This is because of the small size of the sample. However, the sample statistics are dependable as true measures.

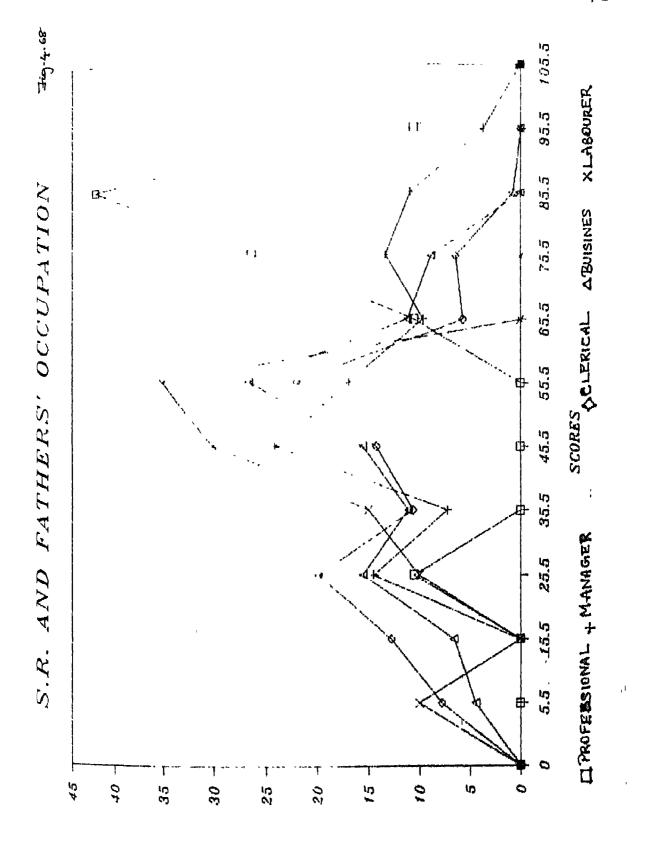
SCHOLASTIC READINESS AND OCCUPATION OF FATHERS

TABLE 4.68 (a)

DISTRIBUTION OF SCHOLASTIC READINESS SCORES AND
OCCUPATION OF FATHERS FOR THE TOTAL SAMPLE
IN PERCENT FREQUENCIES

	40, 40,						
			F %	F %	Clerical F %	F %	F %
		10	o		7.B0	4.40	
11	***	20	٥	Ö	12.76	6.60	o
21	-	30	10.52	14.45	19.85	15.50	10.00
31	-	40	٥	7.22	10.63	11.10	15.00
41	-	50	o	24.09	14.18	15.50	30.00
51	-	60	0	16.86	21.98	26.60	35.00
61		70	10.52	9.63	5.67	11.10	o
71	-	80	26.31	13.25	6.38	8.80	o
81	~	90	42.10	10.84	0.70	0	o
91	-	100	10.52	3.61	0	0	o
		ہیں جے سے ت	Shirk which while while grows made hidd with your year	o mano figure to come union manor figure units former or	and from the cost was one that this test state 1880 to		

Figure 4.68 depicts the distribution of scholastic Readiness scores and Occupation of Fathers for the total sample in the form of frequency polygons. The frequencies are plotted as percentages.



EREGIENCIES (*)

RELEVANT STATISTICS OF SCHOLASTIC READINESS SCORES AND OCCUPATION OF FATHERS FOR THE TOTAL SAMPLE

an die	مر 150 بالد بالد بالد بالد <u>بالد 150 با</u>	المن الله المن الله الله الله المن المن المن الله	والمراجع المراجع	مانه شده التار التار شده ماند		
Group	Mean	Median	Mode	SD	SK	Kur
_表 # \$P P M P P M P P P P P P P P P P P P P	بن <u>ه</u> یک چې صد یکن بدو	وي جود ميد مان جود يود عنه خود منه خود			Mar offi with this Mg Mili was inco in	
Business	45.05	48.35	54.96	18.85	-0.525	0.288
Labourer	41.50	45,50	53.5	15.29	-0.784	0.207
Clerical	39.04	39.50	40.40	20.04	-6.790	0.302
Manager	55.62	53.00	47.75	20.02	0.392	0.268
Professional	75.50	91.12	92.37	18.91	-0.892	0.123

The distributions of scholastics readiness scores and occupation of fathers for the total sample are almost normally distributed. Except the managerial group, the distributions of the other four groups are negatively skewed. Distributions of group 2 and 5 are leptokurtic, and that of groups 1, 3 and 4 are platykurtic.

FIDUCIARY LIMITS OF MEAN & SD OF SCHOLASTIC READINESS SCORES

AND OCCUPATION OF FATHERS FOR THE TOTAL SAMPLE

TABLE 4.68 (c)

# 10 PL pl qui de 10 pt pt est qui est pl est qui est qui est	وها کال د د این ایاز این بازد بازد بازد در این		~~~				
Group	SEM	~~~~		95	~~~	. 9	
Business	2.81	39.54	-	50.56	37.80	-	52.30
Labourer	3.42	34.79	-	48.20	32.67	-	50.32
Clerical	1.68	35.73		42.35	34.69	-	43.40
Manager	2.19	51.31	-	59.92	49.94	-	61.29
Professional	4.34	66.99	-44	84.00	64.30	-	86.69
SE	of SD						
Business	1.99	14.94	***	22.76	13.70	-	23.99
Labourer	2.42	10.53	_	20.05	9.03	_	21.56
Clerical	1.19	17.69	-	22.38	16.94	-	23.13
Manager	1.56	16.97		23.08	16.00	***	24.05
Professional	3.08	12.97	-	24.95	10.96	•	26.86
							~

The .95 and .99 confidence limits for the Means and SDs of Scholastic Readiness scores and occupation of fathers for the total sample do not have very narrow ranges. This is so because the size of the sample is small, all the same, the sample statistics are almost normal.

SCHOLASTIC READINESS AND ECONOMIC STATUS

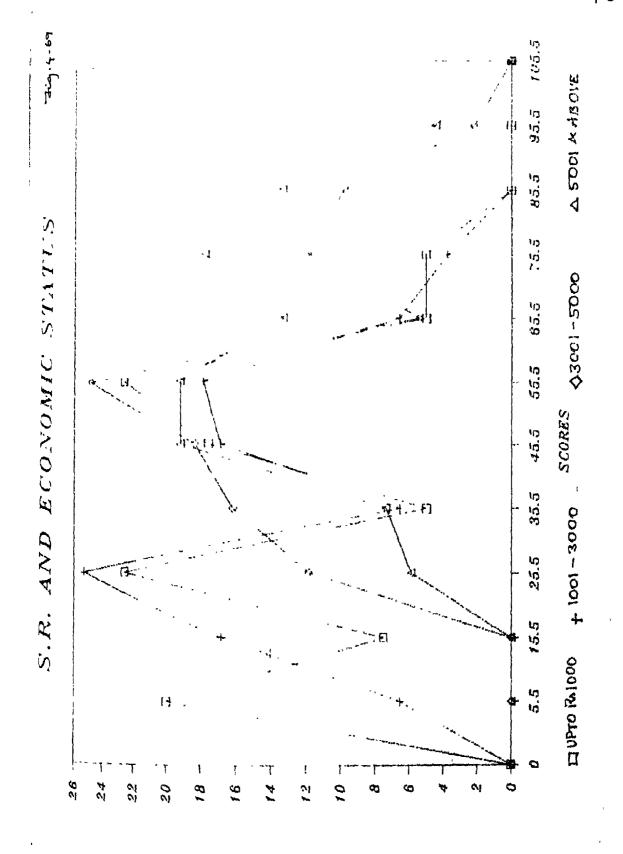
DISTRIBUTION OF SCHOLASTIC READINESS SCORES ON THE

BASIS OF ECONOMIC STATUS FOR THE TOTAL

SAMPLE IN PERCENT FREQUENCIES

	<u></u>			ر در است کند است است است کند کنان _{اس} ت سند کند کند از است بند است کند از است به ر		
Scores		5	Upto Rs.1000	1001 - 3000	3001 - 5000	5001 and
			% F	% F	% F	% F
		10	20.00	6.54	O	o
					0	O
11		20	7.50	16.82	Ü	O
21	-	30	22.50	25.23	11.82	5.88
31	~	40	5.00	6.54	16.12	7.35
41	-	50	17.50	16.82	18.27	19.11
51	-	60	22,50	17.75	24.73	19.11
61	-	70	5.00	6.54	5.37	13,23
7 i		80	5.00	3.73	11.82	17.64
91	***	90	0	o	9.67	13.23
91	••	100	o	o	2.15	4.41

Figure 4.69 depicts the distribution of Scholastic Readiness scores and Economic Status for the total sample in the form of frequency polygons. The frequencies are plotted as percentages.



LEGIENCIES (*)

RELEVANT STATISTICS OF SCHOLASTIC READINESS SCORES ON THE
BASIS OF ECONOMIC STATUS FOR THE TOTAL SAMPLE

فيد بي النارحة أنك أبد لبن عمر كا يو	- است زنن عنب	ه هند منه حيد نيد بلوه پيدر پر	ئے کی بھی کے کہ ایک آباد ہے۔ بھی تاہیر جبلا میں کی کی کے بھی ہے۔		Jun 1640 1645 1645 1645 1644 1644 1644 1644 1644		مد ددن چون نیش آنان مکا مود ایند
Group		Mean	Median	Mode	SD	SK	Kur
1. Upto Rs.1000	-	35.00	30.50	21.5	21.44	0.629	0.333
2. Rs.1001 Rs.3000		36.34	32.64	25.24	18.90	0.587	0.321
3, Rs.3001 Rs.5000		53.56	52.02	48.93	18.96	0.244	0.274
4. Rs.5001 above	&	60.94	59.73	57.30	18.58	0.195	0.295
		الله الله من الله الله الله الله الله الله) and may say 400 000 400 to	ر خيب مين اينية يين هند ونيد اينيه اينيه و		

The distribution of Scholastic Readiness scores and Economic Status for the total sample is near normal. The distributions are positively skewed and platykurtic in nature.

TABLE 4.69 (c)

FIDUCIARY LIMITS OF MEAN & SD OF S.R. SCORES ON THE BASIS

OF ECONOMIC STATUS FOR THE TOTAL SAMPLE

		~~						
Gr	oup	، ۲۰ سه سد. س	SEM	200 May 1,000 mp may may 1,000 600 p	· ·	95		.99
1.	Upto Rs.1000					41.64		
2.	Rs.1001 Rs.3000	to	1.82	32.75	-	39.92	31.62	- 41.05
3.	Rs.3001 Rs.5001	to	1.96	49.70	-	57.41	48.49	- 58.63
4.	Rs.5001 above	and	2.25	56.52	**	65.35	55.12	~ 66.75
			SE of	SD				
	Upto Rs.1000		2.40	16.72	~	26.15	15.23	- 27.65
2.	Rs.1001 Rs.3000	to	1.29	16.35		21.44	15.55	- 22.24
3.	Rs.3001 Rs.5001	tin	159	16.22		21.70	15.36	- 22,56
4.	Rs.5001 above	and	1.60	15.44	*em	21.72	14.45	- 22.71
	**							

The .95 and .99 fiduciary intervals of Means and SDs of Scholastic Readiness scores and Economic Status for the total sample have narrow ranges except group 1 which has slightly wide range. This could be because the sample is very small.

SCHOLASTIC READINESS AND NUMBER OF SIBLINGS

TABLE 4.70 (a)

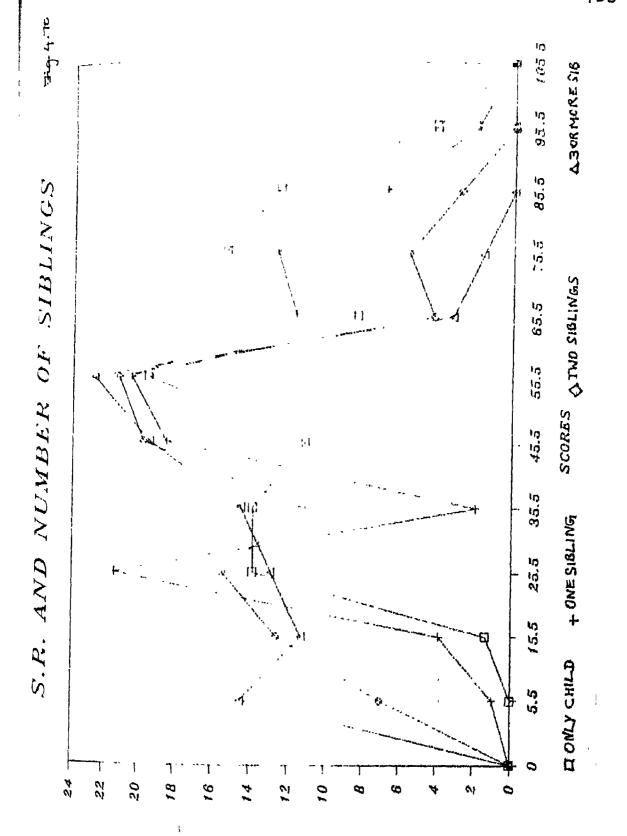
DISTRIBUTION OF SCHOLASTIC READINESS SCORES

AND NUMBER OF SIBLINGS FOR THE TOTAL

SAMPLE IN PERCENT FREQUENCIES

Sco				One Siblings	- -	Three or more
1	•	10	o	0.97	7.04	14.51
11		20	1.30	3.88	12.60	11.29
21	**	30	13.88	21.35	15.49	12.90
31	11.7	40	13.68	1.94	11.26	14.51
41		50	11.11	111.44	19.71	19.33
51	-	60	19.44	20.38	21.12	22.58
61	-	70	0.34	11.65	4.22	3.22
71		80	15.27	12.62	5.63	1.60
81		90	12.50	6.79	2.81	0
91	_	100	4.16	1,94	0	o

Figure 4.70 depicts the distribution of Scholastic Readiness scores and Number of siblings for the total sample in the form of frequency polygons. The frequencies are plotted as percentages.



EREGUENCIES (%)

TABLE 4.70 (b)

RELEVANT STATISTICS OF SCHOLASTIC READINESS SCORES ON THE

BASIS OF NUMBER OF SIBLINGS FOR THE TOTAL SAMPLE

¹⁰¹ 201 201 500 500 500 500 500 500 500 500 500 5		after majo tono velto (mor med tito) hele diffe) Terr may says bein 1660 bein 4660 4660 4660 4	لا توسق دروم مثلاء هيانه سيان عديد فيم		~~~~~
Group	Mean	Median	Made	SD	SK	Kur
والمن فيدن المن فيدن والمن المن والمن المن المن المن المن المن المن المن		tion make their new 1880 begin steen have been	ر هوي ويون مورد مدر جمد وده دون			
Only Child	56.19	59.50	54.11	21.49	9.690	0.317
One Sibling	51.32	52.16	53.B4	21.01	-0.120	0.330
Two Siblings	40.42	42.28	45.99	20.20	-0.275	0.284
Three or More	35.66	39.27	43.51	18.79	-0.417	0.312

The distribution of Scholastic Readiness scores and Number of Siblings for the total sample is near normal. Excepting the group of only child, the distributions of the remaining three groups are negatively skewed. The distributions are platykurtic in nature.

TABLE 4.70 (c)

FIDUCIARY LIMITS OF MEAN & SD OF SCHOLASTIC READINESS SCORES

ON THE BASIS OF NUMBER OF SIBLINGS FOR THE TOTAL SAMPLE

نبر مقط کیمیا کیلید باشد. میلیان مشیخ طبیع مینیو کیمیا کیما دیگا ۱۹۹۳	The state of the s	over and wait than two wind aims four traje		همه الدم خان برده شده ميم خيره وسا نبيد	,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,	~~~	
Group	SEM		. 9	5		.99	
ب جرہ ہے اس بات سہ اور سے دینہ شہر بات جم میں ہ	سه ديم وجه سايه وجال اسيار احمل خاليه دا				سية الله الأن الله الله الله الله الله الله	<u></u>	
Only Child	2.53	51.22	-	61.15	49.65		62.73
One Sibling	2.07	47.26	-	55.38	45.98		56.66
Two Siblings	2.39	35.73	-	45.12	34.24	-	46.61
Three & More	2.38	30.98	-	40.33	29.50		41.81

TABLE 4.70 (c) - Contd.

المار	make the state of A race over the sea	THE PERSON NAMED IN THE					
Group 9	E OF SD			.95			9 9
الله خوب منتها فيهاد فوق شهاد فيال منهاد تمثير الأماد أنهاد الأماد فيها		ومن الله الله الله والد الله الله الله	··	*= #4			
Only Child	1.79	17.96		25.01	16.85	•••	26.13
One Sibling	1.47	18.13	1	23.90	17.22	_	24.81
Two Siblings	1.70	16.86		23.53	15.80	-	24.59
Three or More	1.69	15.47		22.11	14.42	-	23.16
سے میں جو مدر بھے بنان کے بھی گئر جان سے میں ہے ہے		an an page good board from term	-				

The .95 and .99 confidence limits for the means and SDs of Scholastic Readiness scores and Number of Siblings do not have narrow ranges. This may be due to the small size of the sample. All the same, the sample statistics are dependable.

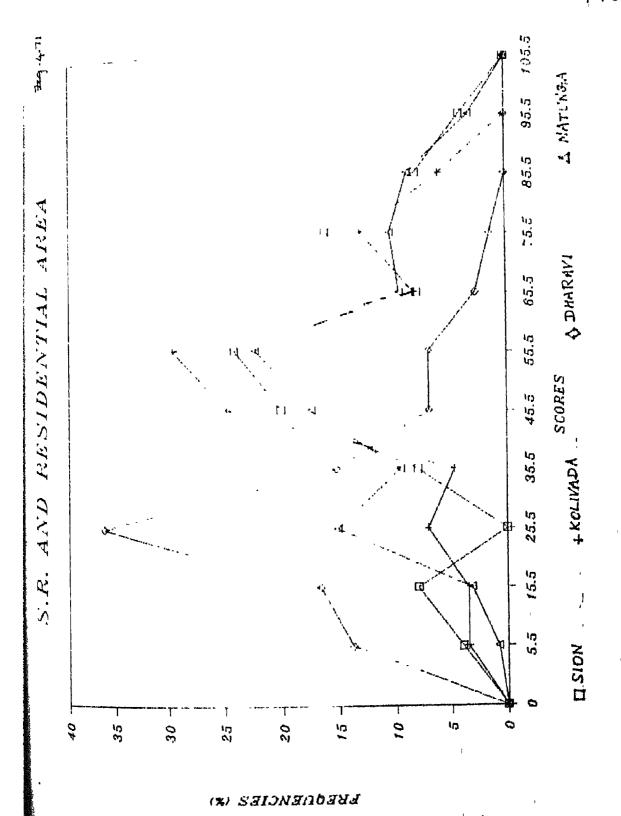
SCHOLASTIC READINESS AND RESIDENTIAL AREA

DISTRIBUTION OF SCHOLASTIC READINESS SCORES ON THE
BASIS OF RESIDENTIAL AREA FOR THE TUTAL
SAMPLE IN PERCENT FREQUENCIES

TABLE 4.71 (a)

			gand 15g. gagan yangin gista kaing gari 1966 1966 an B. Namar e . Nag	पर को किये प्रकृत काले नेतान प्रकृत अनीन स्वार्ग नेतानी केता का		
SCO	RES	ı	510N % F	KOLIWADA % F	DHARAVI % F	MATUNGA % F
1		10	4	3.50	13.80	0.79
11		20	8	3.50	16.60	3.17
21	_	30	o	7.05	36.10	15.07
31	-	40	8	4.70	15.20	9.52
41	**	50	20	24.70	6.94	17.40
51	-	60	24	29.41	6.94	22.20
61		70	8	8.23	2.70	9.52
71	-	80	16	12.94	1.38	10.31
81		90	8	5.88	o	8.73
91		100	4	0	Ó	3.17
					* * * * * * * * * * * * * * * * * * * *	

Figure 4.71 depicts the distribution of Scholastic Readiness scores and Residential Area for the total sample in the form of frequency polygons. The frequencies are plotted as percentages.



RELEVANT STATISTICS OF SCHOLAGTIC READINESS SCORES ON THE
BASIS OF RESIDENTIAL AREA FOR THE TOTAL SAMPLE

ي بند انه بند بند به اما بند	والله والله والله المالة ا	· · · · · · · · · · · · · · · · · · ·	, कृष्ण कला साथ आहे. प्रतित्ते कृष्ण ग्रीव्य कर्णा व	يها بنيه عنه بنية فيه جمل الحد هذه		
Group	Mean	Median	Mode	SD	SK	Kur
Bion	54.70	54.66	54.60	22.07	4.52	0.225
Koliwada	51.97	52.70	54.15	18.76	-0.116	0.189
Dharavi	27.86	25.88	21.93	15.85	0.373	0.211
Matunga	52.56	52.28	51.73	20.81	4.00	0.264
		- San Sip was 174 Med All All All All The Age			و جويد شاول بوقت بوقت خارج .	

The distributions of Scholastic Readiness scores Residential-wise are almost normal, except Dharavi area, in which there is a slight variation. Except the Koliwada area, the other three distributions are positively skewed. Except the 4th group which is slightly mesokurtic, the other 3 groups are leptokurtic.

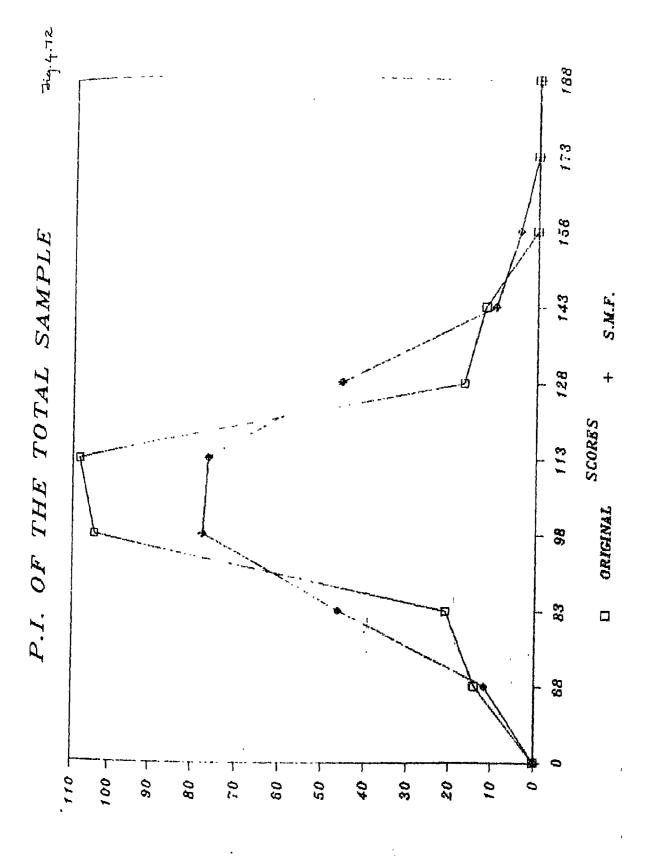
PARENTAL INVOLVEMENT

TABLE 4.72(a)

FOR THE TOTAL SAMPLE

one होते केले तरेने तरेने अपने केले जिल्ला केले पहल केले एक प्रश्नों है एक पहले हैं कि स्वता	होश्री प्रत्या प्रस्ता नेते हैं है है दें विनय प्रस्तु स्थिति होती को प्रति प्रति प्रथम कोई प्रदेश स्थित सम्बद्ध स्थाप स्याप स्थाप स्याप स्थाप स्याप स्थाप	يون اسية مديد فويد عليه عليه عليه الحدث الجدّ عبد الحدد الله عبد الله عليه عبد (Columbia) الله الله الدور ال
Scores	F	SMF
من المراح (gran die las in der deut delt de van hald gege auch der died hard den som alle dem hald dem dem dem dem dem dem	پيده چيو پسه ميد کنار پاييد سير مند سند جيه ميل کړي گرد شده سال سي سند راند راي د ده ده
61 - 75	14	11.60
76 - 90	21	46.30
91 - 105	104	17.50
106 - 120	108	76.30
121 - 135	17	45.60
136 - 150	12	9.60
151 - 165	o	
166 - 180	0	
	केन्द्र असूत्र प्रमान अन्य केन्द्र वेदन्त वेदन	
TOTAL	276	

Figure 4.72 gives the original and smoothed frequency polygons of P.I. scores for the total sample.



FREGUENCIES

TABLE 4.72(b)

FOR THE TOTAL SAMPLE

				,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,		
N	Mean	Median	Mod e	SD	sĸ	kur
N					ڪ شما خود جي هند بيد	
	ناہ عد ہنے ہے ۔۔۔ جہ خبر میں دنے ہے			40 47	-0.067	0.268
276	105.01	105.36	106.05	15.67	-0.007	•
					مين جين هي جين اين هي جين اين جي هي جي	
	~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~					

The distribution of P.I. scores for the total sample is near normal. The distribution is negatively skewed and is platykurtic in nature.

TABLE 4.72(c)

FIDUCIARY LIMITS OF MEAN & SD OF P.I. SCORES FOR THE TOTAL SAMPLE

		والله الله الله الله الله الله الله الله	
Statistic	SE	.95	.99
Statianic.		و چون جين جين جين ڪي جي جي جي اين اين جي پين جي جي جي جي جي جي جي جي دي جي جي جي دي اين	****************
ا جو من سه دو جه سه بند که زاده دی شد شو		103.16 - 106.86	107.58 - 101.44
Mean	0.94		13.93 - 17.38
nn.	0.67	14.35 - 16.97	13.73
SD		ومن شوار منت شدر منت هام مراور وروز وروز بين المن المناور من مناور وروز وروز المناور مناور وروز وروز	- 表现非常常常是是非常有害的。

The Fiduciary limits of the Mean and 8D for the P.I. scores of the total sample has fairly narrow ranges. This implies that the sample statistics are dependable in terms of the degree to which they represent the population parameters.

m - 25 602 - 1

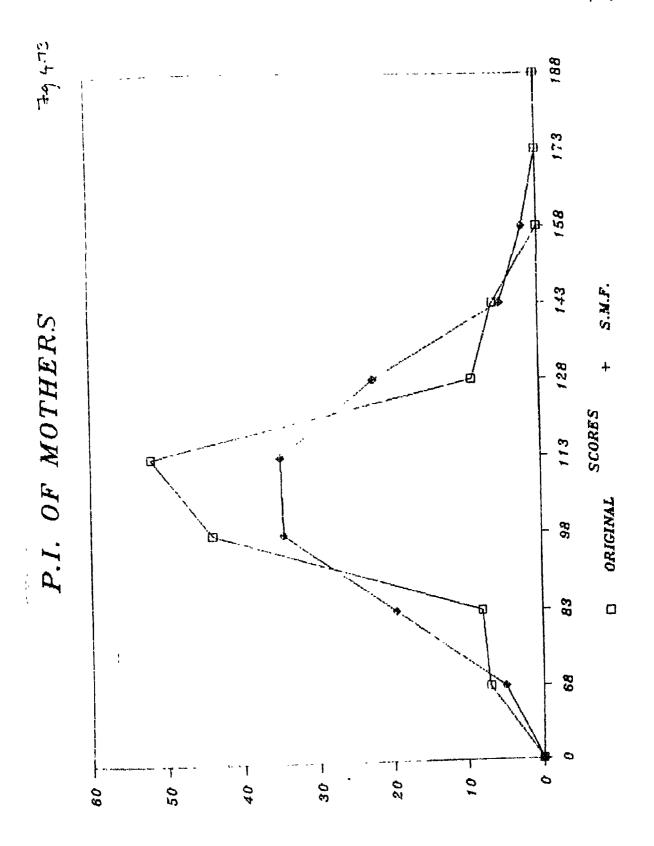
TABLE 4.73 (a)

DISTRIBUTION OF MOTHERS INVOLVEMENT

SCORES

و هذه هذه حمل من هنگ کاران مورد علیه است مورد مشد مین منی کارد بودم ایکان میم نیمو		SMF
e s	F	
- 75	7	5.00
	8	19,60
- 90 - 105	44	34.60
- 120	52	35.00
- 135	9	22.30
- 150	6	5.00
- 165	o	
, - 180	0	
	and the land now upper step that the	
TOTAL	126	
TOTAL		ي من جن الحد الحد الحد الحد الحد الحد الحد الحد

Figure 4.73 gives the original and smoothed frequency polygons of Mothers Involvement scores.



EBEGNENCIE2

TABLE 4.73 (b)

RELEVANT STATISTICS OF MOTHERS INVOLVEMENT

,		ويدر جين جين ميد چين چين دين هي ميد ويد				
N	Mean	Median	Mod @	SD	SK	Кшг
126	105.86	106.65	108.25	16.00	-0.149	0.255
			· · · · · · · · · · · · · · · · · · ·			

The distribution of P.I. scores among Mothers is near normal. The skewness of the distribution is negative and is slightly leptokurtic.

TABLE 4.73 (c)

OF MOTHERS INVOLVEMENT

		يت جي في جي هي جي هي جي الحق عن جي	******************
Statistic	SE	. 95	.99
	جود اوراد البيار ليكن هيارا جواد المنه جود جواد المنه بيس	يمي المن المنا على المنا ا	والله الله الله الله الله الله الله الله
Mean	1.43	103.06 - 108.65	102.18 - 109.54
SD	1.01	14.02 - 17.99	13.39 - 18.62
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		يست ايست مين سيد مين مين مين مين مين المين المين المين المين المين مين مين المين المين مين مين مين مين مين	ميد جيد هيا، جيد هيد هيد هيد جيد جيد ميد ميد ميد هيد ميد هيد ويد

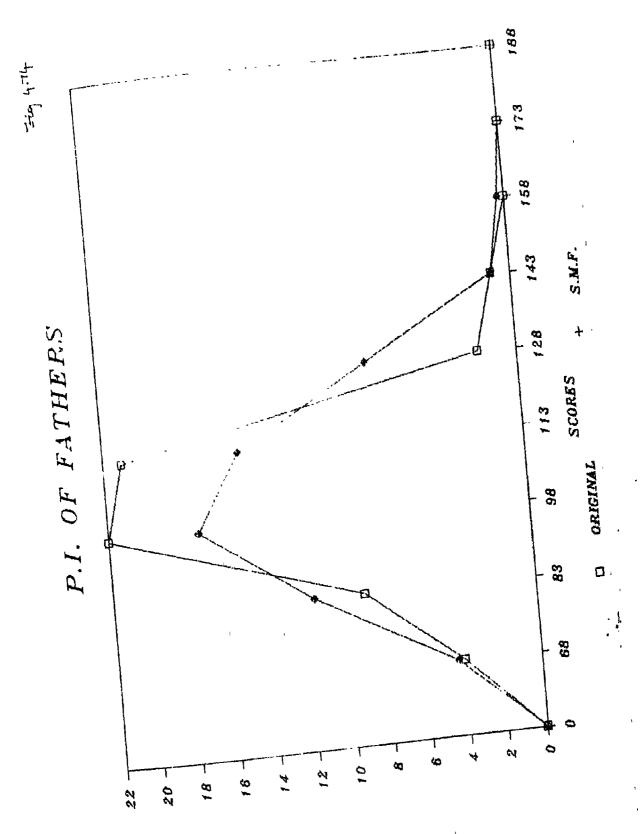
The Fiduciary limits of Mean & SD for the P.I. scores of Mothers have fairly narrow ranges. This indicates that the population parameters are fairly dependable as true measures.



DISTRIBUTION OF FATHERS INVOLVEMENT
SCORES

والما القال القال القال القال المال المال المال القال القال القال القال المال القال المال القال المال المال ا	. प्रोते क्षेत्र क्षण पण्य नके केंद्री केवा नहीं केवा पण पण रूप के होते को तथा तथा क्षण क्षण तथा तथा तथा क्षण को कुछ को कुछ को तथा है। -	د الله الله الله الله الله الله الله الل
Scores	F	SMF
211 TO 220 TO 120 TO	s Mid Mily क्षेत्र में की तर प्रकृतिक कि प्रकृतिक प्रकृतिक अर्थ को प्रकृतिक प्रकृतिक प्रकृतिक अर्थ को प्रकृतिक स्थापन	ر. الله ويال الله ويال الله الله ويال ويوا الله ويوا الله ويوا الله ويوا الله ويوا الله ويال الله ويال الله وي
61 - 75	4	4.30
76 - 90	9	11.67
91 - 105	22	17.33
106 - 120	21	15.00
121 - 135	2	B.00
136 - 150	1	1.00
151 - 165	0	
166 - 180	0	
	अंग कुछ कोर्स अंग्रेस क्षेत्र केर्स पहले प्रकृत	
TOTAL	59	

Figure 4.74 gives the original and smoothed frequency polygons of Fathers Involvement scores.



EBEGNENCIES

TABLE 4.74 (b)

RELEVANT STATISTICS OF FATHERS INVOLVEMENT SCORES

		ينه سنها لنجله جالة الانتها المالة	. CO Chil (/ 1/2 Chil hith had 1/2 Chil	40 44 64 44 54 54 54 40 40 46 4		
N	Mean	Median	Mode	SD	SK	Kur
	ندن خود می کند باید باید مید بنین م _{یاد} م	المناه ويت ويت ويت ويت ويت ويت ويت ويت				
59	100.80	101.75	103.66	15.25	-0.188	0.257
	شده سرد کند مید سند نیمه بیند بنید سد بی	. — —				

The distribution of P.I. scores for Fathers is almost normal. The curve is negatively skewed and is leptokurtic in nature.

TABLE 4.74(c)

FIDUCIARY LIMITS OF MEAN & SD OF MOTHERS INVOLVEMENT SCORES

الله وهذا الدين بوات الدين فيما يدايد والدين الدين	ورزه جود منده عدم حدم حدم جدم جدم مدم عدم مريد	المنافر بيناه فيتما فيتها والها ومناه بالمنافر بالمنافر والمنافر والمنافر فيتمام والمنافر بالمنافر منافرة المنافر	و جماد بيت جيد خيد خيد ديد ديد ديد ديد ديد ديد ديد د
Statistic	S.E.	. 75	. 99
00 TH LE SP \$10 My Viv Viv Con CON CON SEE A	نيب ميث نائب منت سنة ليبن ليبن النظ الأند عنيا بين	الدهور المناه	ىدر نىڭ چەر ئىل بىل چىر بىل چىر يىل چىر يىل كارى كارى كارى كارى كارى كارى كارى كارى
Mean	1.98	96.91 - 104.69	95.68 - 105.92
SD	1.41	12.48 - 18.01	11.61 - 18.88
	مية نجل ويان بيس نييد منيد ويند جين پروز ويند ي	. New date while type talks think give year tame space year upon whise own space space space than the talk the	

The .95 and .99 fiduciary intervals of the mean & SD of Fathers Involvement scores is fairly narrow signifying that the estimated statistics are dependable as true measures.

TABLE 4.75 (a)

DISTRIBUTION OF PARENTAL INVOLVEMENT

SCORES FOR "BOTH PARENTS"

	وه القابل المان	***
Scores	F	SMF
61 - 75	3	2.30
76 - 90	4	15.00
91 - 105	38	25.60
106 - 120	35	26.30
121 - 135	6	15.30
136 - 150	5	3.60
151 - 165	o	
166 - 180	•	,
	the light way mile also deed hind date under	
TOTAL	71	

Figure 4.75 gives the original and smoothed frequency polygons of P.I. scores of "Both Parents".

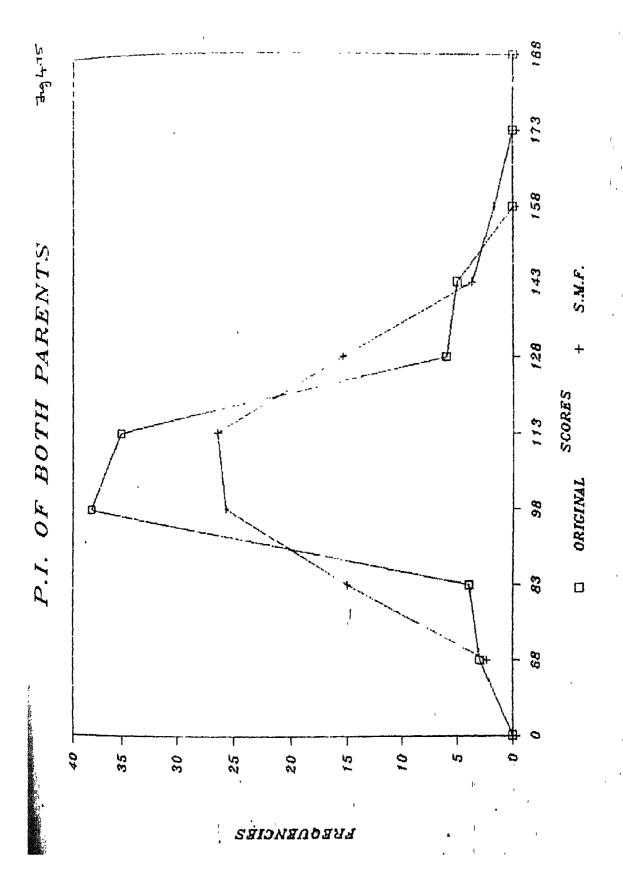


TABLE 4.75 (b)

FOR BOTH PARENTS

	ہ جب بند ہیں ہیں ہے نہ ہے ہیں ہے					
N	Mean	Med 1 an	Mode	SD	SK	Kur
		نداد سده الدين ويزار شاط مادار بيها بطره سيها <u>سي</u>	د هند وسید کنان دیگ جیگ کنند کنار وسی حدید س		<i></i>	
91	106.57	105.71	104.00	14.94	0.172	0.276
			ية علين بالدي وعود ومراه بالمن جدد الأمن يبعد وجد و			

The distribution of F.I. scores for both parents is near normal. The skewness of the distribution is positive and the curve is platykurtic.

TABLE 4.75 (c)

FIDUCIARY LIMITS OF MEAN & SD OF P.I. SCORES

FOR BOTH PARENTS

PAR 474 MAY MAY AND \$150 PAR AND		كالم ميدل ليمل بدائر بيداء الفدر والدر والد والدر والدا المنا المناه أوجل والتد وليد أنسا المنا متلا ألبان	
Statistic	S.E.	. 95	.99
و دومار واحد دومار ماران الربوا ماران الماران ويزاد الماران ويزاد		الله فيها وبين منها بيان بين فيها فيها منها ينها ويها ويها ويها ويها ويها فيها بين فيها بين الها ويها	جيد داخل مين شده مين دين بين سيد بين نين بين بين ديد ديد ديد بين بين بين ا
Mean	1.57	103.50 - 109.64	102.53 - 110.61
SD	1.11	12.76 - 17.12	12.07 - 17.81
11 17 II		والمرافقة والمرافقة المرافقة والمرافقة والمراف	

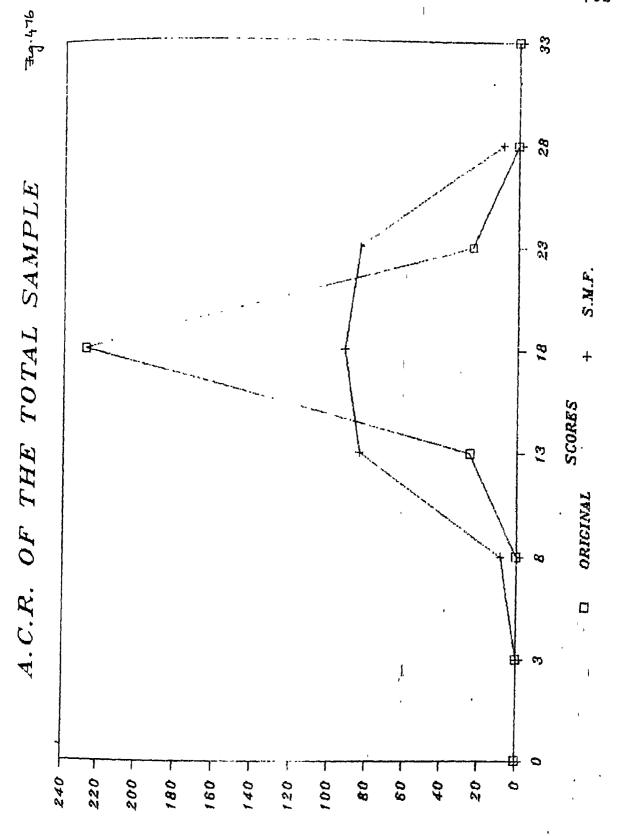
The Fiduciary limits of Mean & SD of the P.I. scores for Both Parents have fairly narrow ranges. This indicates that the dependability of the sample statistics as true measures.

TABLE 4.76 (a)

SCORES FOR THE TOTAL SAMPLE

، فعد جدود خيزة شهر وهم ثريث بسب جدود قديد هما الحد هما أليان بطار شهر بيش	مين بيان داخل الله الله الله الله الله الله الله ا	ستد بوقت هي نويد همه مدار مدار جواز هواز عليه بيان ايروا مايد ايروا ايرون ايرون هي مهم هوي هون مدر من و
Scores	F	SMF
من جد الله الله على حد الله الله الله الله الله الله الله الل	بيد الله ويال فيود فيدر بين بكار جي يؤردُ جيد جي سيد فيان خلت : A است سنة شاه بليد يوي سيد	rich hijk. Wie den sehr den dijn sein zijn den lage heet soon den seen gele ook met de seen gele ook met der see
1 - 5	0	
6 - 10	0	9.30
11 - 15	25	84.00
16 - 20	227	92.00
21 - 25	24	83.40
26 - 30	0	8.00
	بيها التدر سده ويوا وأله شبأ سيا لينم أنش	
TOTAL	276	
		ي من جي روي جي الله علي الله وي من جي الله الله وي الله الله الله الله الله الله الله الل

Figure 4.76 gives the original and smoothed frequency polygons of A.C.R. scores for the total sample.



REBOUENCIES

10BLE 4.76 (6)

RELEVANT STATISTICS OF A.C.R. SCORES FUR THE TOTAL SAMPLE

			Mile 1977 them now high days man may blink day			***************************************
N	Mean	Median	Mode	SD	SK	Kur
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					~~~~~~
276	17.98	17.99	18.00	2.11	-0.014	0.313
		ال واقع على الرب هذه إنجاز زيري حجو مجور ليبي عبر	· · · · · · · · · · · · · · · · · · ·			

The scores of A.C.R. for total sample is distributed normally. The skewness of the distribution is negative & is platykurtic in nature.

TABLE 4.76 (c)

SCORES FOR THE TOTAL SAMPLE

	بالا فقالة فيناه همي دعيه لدين للنف تعني هوت بإنك عالي	والمرافق والمرافقة فيها منها منها والمرافقة والمرافقة والمرافقة والمرافقة والمرافقة والمرافقة والمرافقة والمرافقة	निरम स्थाप क्षेत्रिक क्ष्मित क्षांत्रि क्षांत्रि क्षांत्रि क्षांत्रि क्षांत्रित त्यान क्षांत्र क्षांत्र क्षांत
Statistic	S.E.	.95	.99
على الله الله الله على حرب الله الله الله الله الله الله الله الل	كالله الثابية جنية والإن فيزية وجي الثانية بيناه منية فيساء منية	والمراجعة	الله الله الله الله الله الله الله الله
Mean	0,13	17.73 - 18.23	17.65 - 18.31
SD	9.00	1.93 - 2.28	1.87 - 2.34
70 TO 12 12 12 12 14 15 16 16 16 16 16 16	والمراجعة المراجعة ا	سيد والبياء إنجاء بالحد المال ملحب وهي براها حيث فلاله مايان لعملا عبدي وجي موريد وبنته اسم عميم ومال بدائد بد	

The fiduciary limits of Mean & SD of A.C.R. scores for the total sample have very narrow ranges. This supports the normality of distribution and also the high degree of significance of the sample statistics.

TABLE 4.77 (a)

DISTRIBUTION OF ACTUAL HANDLING SCORES FOR THE TOTAL SAMPLE

	一百万元 · · · · · · · · · · · · · · · · · · ·	내용 음식 경우 학 학 학 학 학 학 학 등 경 학 학 학 학 학 학 중 하 다 다
Scores	F.	SMF
مات منبو لالناء بيون بيان يدان عادن مارار بيرو بيان دون يون وي وي وي المار إليان بدار	أن جيم الله الله توليد بيون ويش ويش وية ويش الله الله ليان بيان بيان ويت ميث ويت الله ويت الله ويت الله ويت ال) - 마루 (제) 및 리 및 및 네 (및 및)의 및 (제) 및 (트 및)의 및 (제) 및 (M) 및
i ~ 5	0	1.60
6 - 10	5	10.30
11 - 15	26	82.60
16 - 20	217	90.30
21 - 25	28	81.60
26 - 30	0	9.30
	Own day two bod pipel own tool seem that	
Total	276	

Figure 4.77 gives the original and smoothed frequency polygons of A.H scores for the total sample.

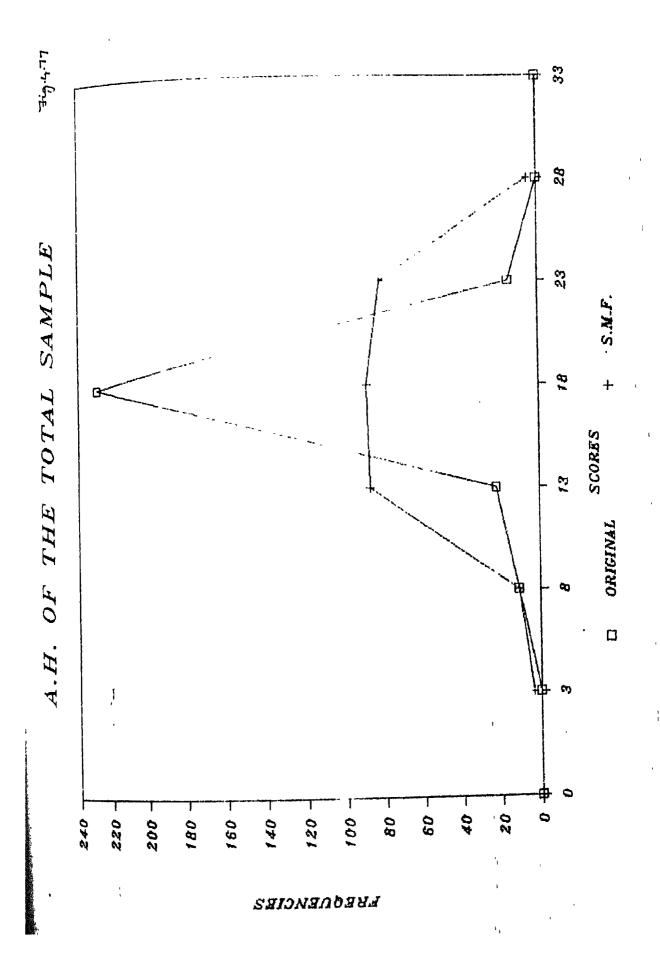


TABLE 4.77 (b)

FOR THE TOTAL SAMPLE

نچ طاہ بید نیے دیے جب	میں میں بین بلند ہم سے میں میں		بيا خوي هندو بياند جدي <u>سند</u> سند جديد الاستان		ست هيد هيد دود کاله ۱۹۰۰ د ۱۹۰۰ د ۱۹۰۰	
N	Mean	Median	Mod e	SD	SK	Kur
			***************************************	ر غیر خو وده شاه به حه ب		
276	17.47	17.80	18.46	2.66	-0.372	0.254
				*		

The A.H. scores for total sample is normally distributed. The distribution is negatively skewed & is platykurtic in nature.

1ABLE 4.77 (c)

SCORES FOR THE TOTAL SAMPLE

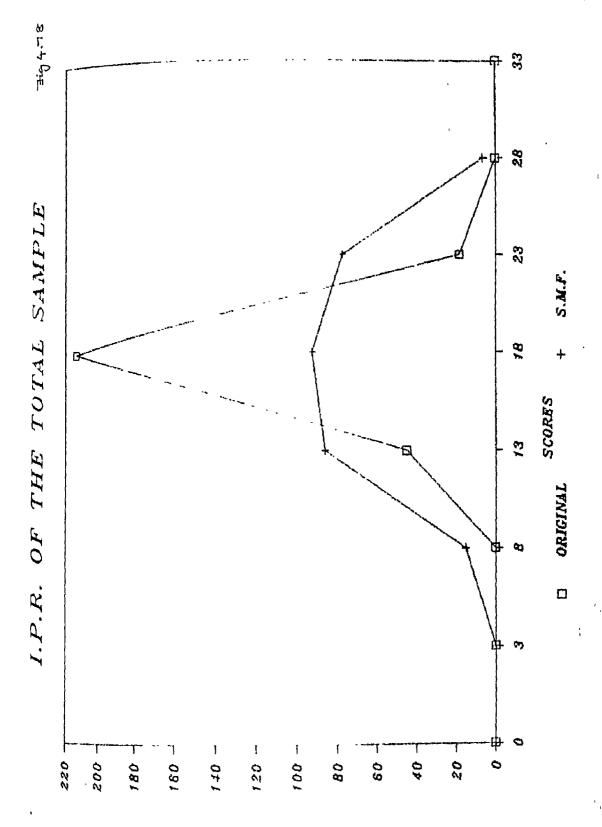
وهو جمع کرد		حالت والله والله المالة يدود اللها الله الله والله الله المالة إليه ووبية بينه عدو دينه أعند يحد بودد عد	
Statistic	S.E.	.95	.99
	सर्थन क्रिकी केन्द्रम पान्य साथा आहा आहा पार्थ के ने पै	y mysy kala misy nin a kala man' pina man mpay kala misy man diang-mph naka tana tana bala man man' aling	
Mean	0.16	17.16 - 17.79	17.06 - 17.89
SD	0.11	2.43 - 2.88	2.36 - 2.95
and the same desir same same space over think state them	ه جُدِي مِينَ مِينِ مِينِ مِينِهِ مِينِهِ مِينِهِ مِينِهِ مِينِهِ مِينِهِ مِينِهِ مِينِهِ	مين ميسر ميسر ميسر ميسر ميسر مورد مورد مورد مورد مورد مورد مورد مور	الحالة الأمارة المنظ الحدد شامل ومالك أوامي ومناه ميها الحدد ميها الحدد المارة والمالة المارة والواه

The Fiduciary limits of Mean & SD of A.H. scores for the total sample have very narrow ranges thus supporting the normality of the distribution and also indicating the high degree of significance of the sample statistics.

DISTRIBUTION OF INTER PERSONAL RELATIONS SCORES
FOR THE TOTAL SAMPLE

و منها جمع جمع بيس المن المن المن المن المن المن المن المن	ا شار دی این بیان کار بین بین این این این این این این بین این شر بین دی ماه دی وی وی این کار	ميد بري هيد خد هن هيد چيد خان هند هند هند هند هند هند هند هند هند هن
Scores	F	SMF
성이 하는 것 같아 보는 것 같아 보는 것 같아 있다.	من الدار هند هند المن الدار في المن هند هند المن المن المن هند المن هند المن هند المن هند المن هم المن	
1 - 5	0	0
6 - 10	0	15
11 - 15	45	86
16 - 20	213	92
21 - 25	18	77
26 - 30	0	6
	कार काला पांत्र काला प्राप्त विकास प्राप्त व्यक्त	
TOTAL	276	
计可引起 奔車 医腹膜 有效 "我们我们 化二苯酚 网络 化水子 医髓 医脑 "我们 医电子 医肝 不明 化丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二丁二		를 하는 소리 전을 다닐 수에 보면 하게 되면 보다. 수리 보다 보면 보면 보다 보고 소리 위한 ~~ 나를

Figure 4.78 gives the original and smoothed frequency polygons of I.P.R. scores for the total sample.



FREQUENCIES

TABLE 4.78 (b)

FOR THE TOTAL SAMPLE

	به میده وین سند بنده پند چوه جد من م	ره فود دین هم بیده کی دیا سر جیل کے پی ک	والمراجعة فين منت بيان منت بين منت بيان الم		ميت بين هنر دون ودو بين هند هند هند هند	
N	Mean	Median	Mode	SD	SK	Kur
276	17.51	17.68	18.03	2.34	-0.218	0.241
		and this gas they will the same of the sam				

The distribution of I.P.R. scores for the total sample is near normal. The distribution is negatively skewed & is leptokurtic in nature.

TABLE 4.78 (b)

FIDUCIARY LIMITS OF MEAN & SD OF I.P.R. SCORES FOR THE TOTAL SAMPLE.

the same work apply data have been trans the dist bath said	جين فيدا بين اس جي پي پي در دو	فلاد والتد فيمة مناه والله الله والله الله الله الله الله	in hand down hand which would Phill have raise one way and work in
Statistic	S.E.	.95	. 99
المناز وادره مطلد جريد ججود إلكا إيكن كانية هميد ملاحد الجود		هذه جمد است المنا هوم حجل المنا ذيب جميد المنا هوه جميد المنا للمنا جميد بيما بمنا جميد منا	
Mean	0.14	17.24 - 17.79	17.15 - 17.87
SD	9.99	2.14 - 2.53	2.08 - 2.60
		ومن المال في المال ا	حد. حون برادا هند جين براية شنب جين وواد هانا جين لاين است جين برين است

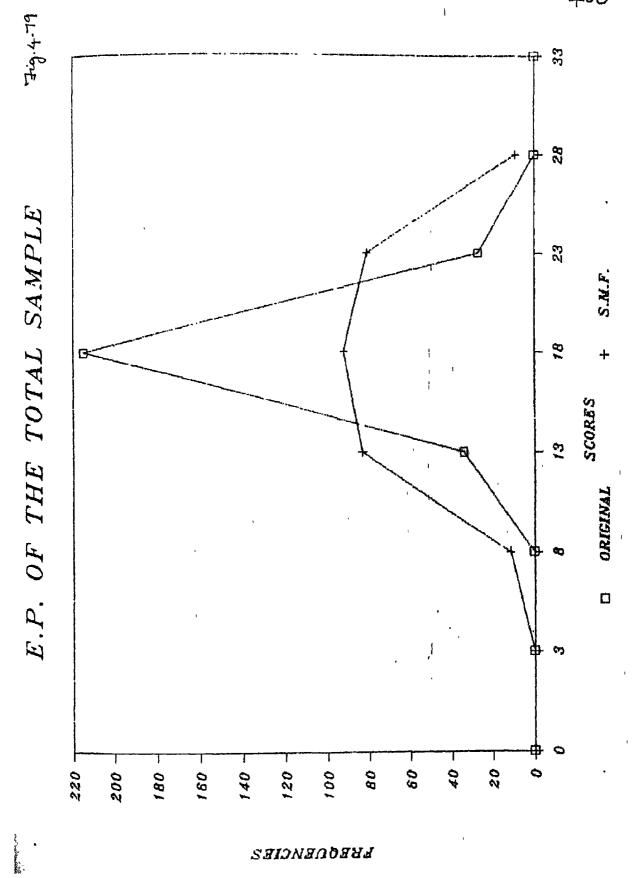
The Fiduciary limits of Mean & SD of the I.P.R. scores for the total sample have narrow ranges. This implies that the sample statistics are dependable in terms of the degree to which they represent the population parameters.

DISTRIBUTION OF EXPECTATIONS OF PARENTS SCORES

FOR THE TOTAL SAMPLE

a for the sea the same that the grad the sea that had been been to see it is not see the	in the same of the same and the state and wife the same and the same a	स्था करते करने केली क्षण करन क्षण पहले प्रेमेंस स्थान क्षण प्रेमेंस स्थान करने करने क्षण क्षण क्षण क्षण क्षण क स्थान
Scores	F	SMF
و من الله الله الله الله الله الله الله الل	القان بيام الله في في أنها من أنه بين بين أنها في أنها بين أنها بين أنها الله الله الله الله الله الله الله ا	III 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이 이
1 - 5	0	
6 ~ 10	0	11.30
11 - 15	34	83.00
16 - 20	215	92.00
21 - 25	27	80.50
26 - 30	0	9.00
10	والله الله الله الله الله الله الله الله	
Total	276	마르트 보십시 마마르 보다. (Since world diplo) Since work hard with these these thank these stays were the size of the size
	u /k == 1 (== = = = = = = = = = = = = = = =	

Figure 4.79 gives the original and smoothed frequency polygons of E.P. scores for the total sample.



PREQUENCIES

TABLE 4.79 (b)

RELEVANT STATISTICS OF E.P. SCORES FOR THE TOTAL SAMPLE

			يناه هاي وين وين الله ينهل بدول الدول الدول الدول الدول			
N	Mean	Median	Mode	SD	sk	Kur
	40 Mg (pag And 15th Ann ann 3m (pag	from erical solve. And office from real solves receive a gape	No Min and Silv (15) 시스 중시 것이 있고 있는	مرود فين المام مناه المام ومناه المام		-
276	17.87	17.92	18.01	2.35	-0.063	0.271

The E.P. scores for total sample is normally distributed. The curve is negatively skewed & is platykurtic in nature.

TABLE 4.79 (c)

FOR THE TOTAL SAMPLE

44 47 ter der der der der der der der 15 sej		صد جدم حدد يادو هايا الفقد بينان بينان بينان البادة برسيا بينان عدد الفقد الفقد عابيا حجود برسيا	gas again sann cann ann agus suith luigh thaith bear an chan san built an san ta
Statistic	S.E.	.95	.99
	و المال	ه سبب سبب میں بیش بیش بیش بیش ایک ایک بیش میں بیش	
Mean	0.14	17.60 - 18.15	17.51 - 18.24
SD	0.10	2.15 - 2.54	2.09 - 2.61
	يه الله المواحد عند جور جور يون يون برمواحي .	و ويور بالله بالله بيس بيس بالله بليان ميه بدير ويور اليون بيان مين بيس مين ويور مين مين ويون مين دران س	سر من

The Fiduciary limits of Mean & SD of E.P. scores for the total sample have narrow ranges. This indicates the normality of the distribution and supports the high degree of significance of the sample statistics.

TABLE 4.80 (a)

DISTRIBUTION OF FACILITIES PROVIDED TO THE CHILD SCORES FOR THE TOTAL SAMPLE

ping well pille seed open wing seed since spill date graph pink state gave hand near sup-	anic atau 1939 tahi tahi dan ilan 644 1006 ilipu ahi Alba Mili kuri dala jim dani ilik ijigi pan gas pagi ang m	त होते हैंगा क्षेत्र क्षेत्र क्षेत्र क्ष्म क्ष्म क्षात्र क्ष्मा क्ष्मा क्ष्मा क्ष्मा क्षम क्षम क्षम क्षम क्षम क्षम
Scores	F.	SMF
سية الله الله الله الله الله الله الله الل	rea mai igan iran iyol ifin diri fire rasi filipi ilin abil ilin asir ilar sari dak diri asir ilar san ilin isa	عدد خود خدد هذه بعد بود مود های این بود های شاه می باد می مود مود شاه باد مود این ا
t - 5	0	
į – J		
6 - 10	. 11	11.00
11 - 15	22	87.00
16 - 20	228	88.30
21 - 25	15	B1.00
26 - 30	0	3.00
	अर्थन प्रथम पुरस्त वर्षन क्या व्यक्त व्यक्त प्रथम प्रथम	
Total	276	
ية هن الله الله الله ويود جود عام الحد الرب نهية كنية بيث حدد الله عند	gy room had while gree why had figur yet adjul gots gots had have two maje had got gots also have two gots gre	on the state of t

Figure 4.80 gives the original and smoothed frequency polygons of F.P. to the child for the total sample.

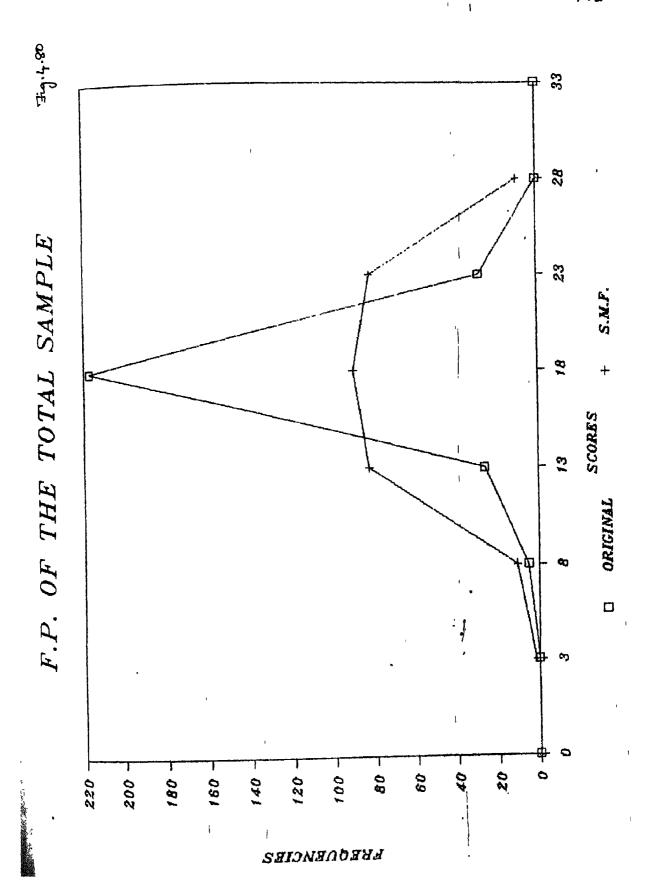


TABLE 4.80 (b)

RELEVANT STATISTICS OF F.P. SCORES FOR THE TOTAL SAMPLE

大学 (大学 (大学 (大学 (大学 (大学 (大学 (大学 (大学 (大学 (
	N	Mean	Med 1 an	Made	SD	SK	Kur
	= بم سرجه سرج						~~~~
	276	17.86	17,97	18.19	2.58	-0.128	0.278
					~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~		

The distribution of F.P. scores for the total sample is normal. The curve is negatively skewed & is platykurtic in nature.

1ABLE 4.80 (c)

FOR THE TOTAL SAMPLE

		والمرافقة والمرافقة مناف والمرافقة والمرافقة والمرافقة والمرافقة والمرافقة والمرافقة والمرافقة والمرافقة والمرافقة	
Statistic	s.e.	. 95	.99
	الله الله الدور موم يست أسم عمو علي <u>بينا عبد سن</u>	، عبد جود میں جود بیٹ انظار کیا۔ جود بیٹ جود جود جود جود بیٹ انظار کیا۔ جود جود جود بیٹ انظار کیا۔	المراه معالى المراه معالى المراه معالى المراه والمراه والمراه المراه المراه المراه المراه المراه المراه المراه
Mean	0.16	17.55 - 18.16	17.45 - 18.26
SD	0.11	2.37 - 2.80	2.30 - 2.87
		والمراجعة المراجعة ال	

The fiduciary limits of Mean & SD for F.P. scores for the total sample are fairly narrow in the ranges. This signifies that the estimated statistics are dependable as true measures.

TABLE 4.81 (a)

DISTRIBUTION OF "PREPARATION OF THE CHILD" SCORES FOR THE TOTAL SAMPLE

و المراقب	ولان حيث فإنه بنجه بها يسب جي ويها هيك كنت كنت الله عند جنه حبت منه بها حيث والله الله الله	T T I I I I I I I I I I I I I I I I I I
Scores	F.	SMF
وي الله الله الله الله الله الله الله الل	روب مين فرد، _ح يب ادال فين بين وال وين الال في الله في الله الله الله والله الله والله والله والله والله والله وال	
1 - 5	0	
6 - 10	3	29.66
11 - 15	86	86.60
16 - 20	171	91.00
21 - 25	16	62.30
26 - 30	o	5.30
	क्षक प्रकार प्रकार गण्या प्रकार साथी वर्गी वर्गी	
Total	276	
97 RT 185 and high line have yet lays and but high time little and and our real	pry 1815 (sed gave levis to take king were som final delay dags dags gape over dags gade (sed high basis tipe	p in

Figure 4.81 gives the original and smoothed frequency polygons of P.C. scores for the total sample.

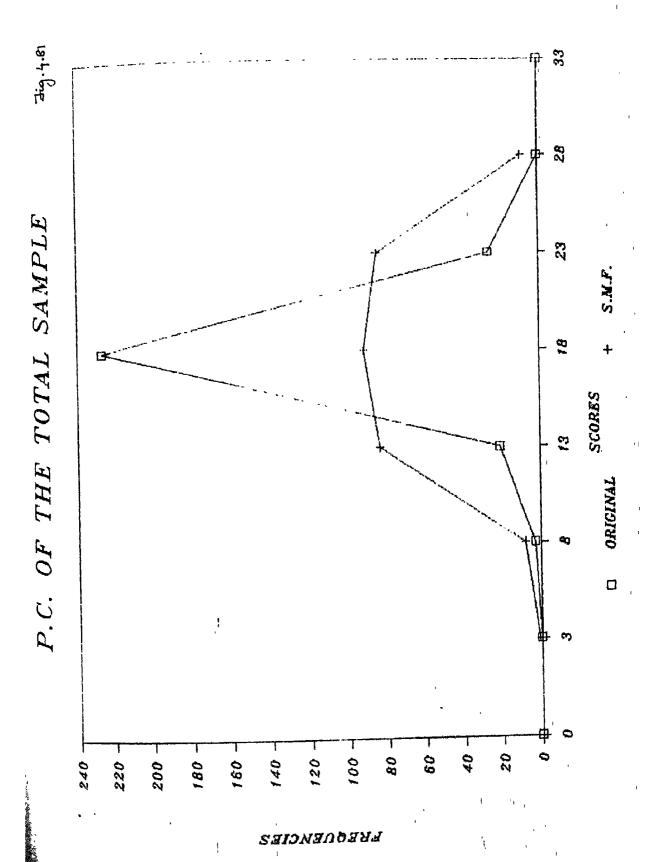


TABLE 4.81 (b)

RELEVANT STATISTICS OF P.C. SCORES FOR THE TOTAL SAMPLE

	وجمعة فيت المحد المالة المالة فالله المالة في المالة في	ير وزين در حدد لوين هيه رخم خلاد وري بره الحدد خد	ر سے جیل کی جس بائی پائین کے جس میں جس ہ			ينه ست بيس عيرة بطا نسب نيبه ڪ
N	Mean	Median	Mode	SD	SK	Kur
· · · · · · ·				#		
276	16.62	16.93	17.55	2.90	-0.320	0.280
			ه مورد الجمار المواد	· 42 Tip i'v, 44 44 5		~~ ~~ ~~ ~

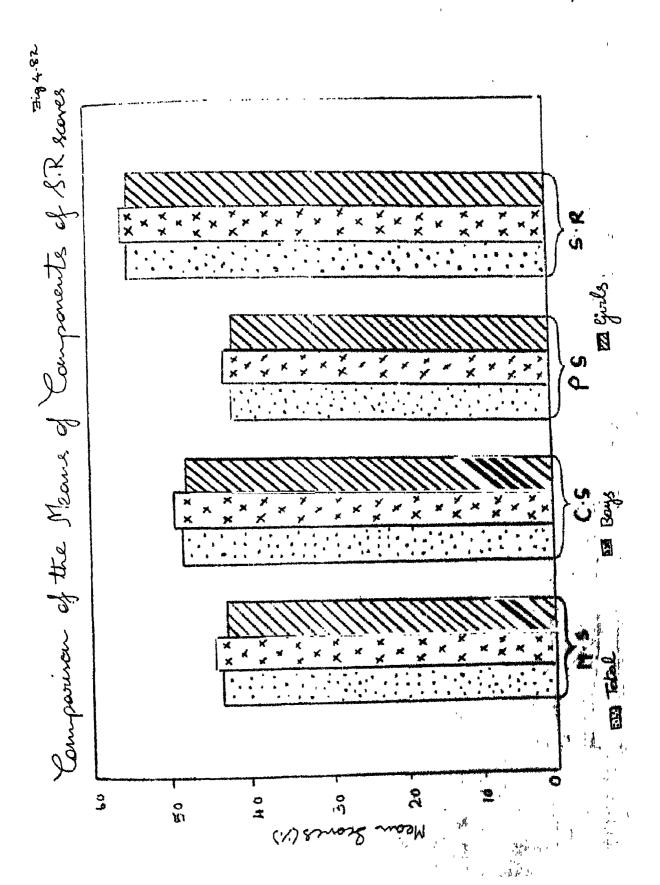
The distribution of P.C. scores for the total sample is near normal. The skewness of the distribution is negative & is platykurtic in nature.

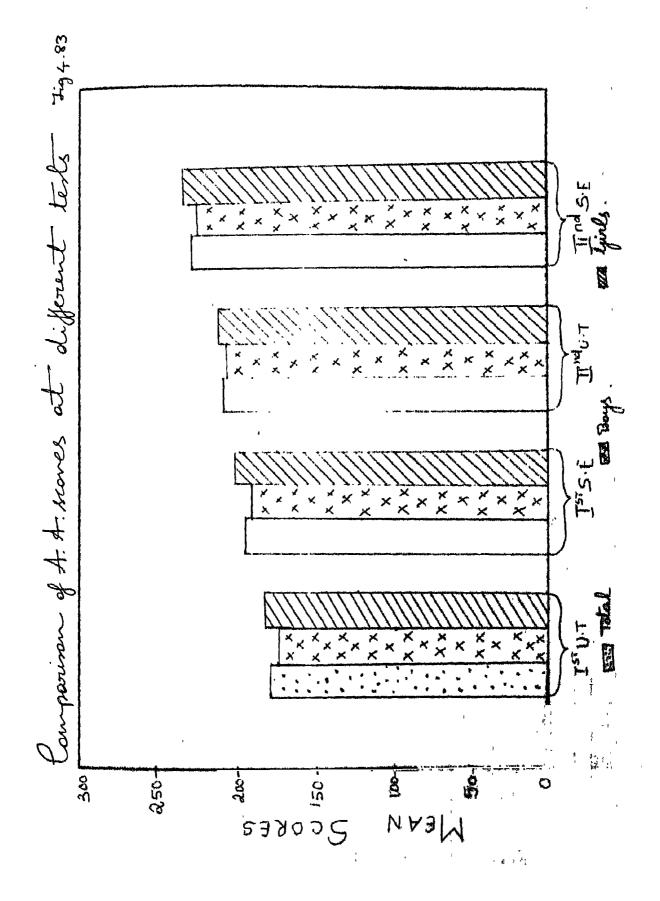
TABLE 4.81 (c)

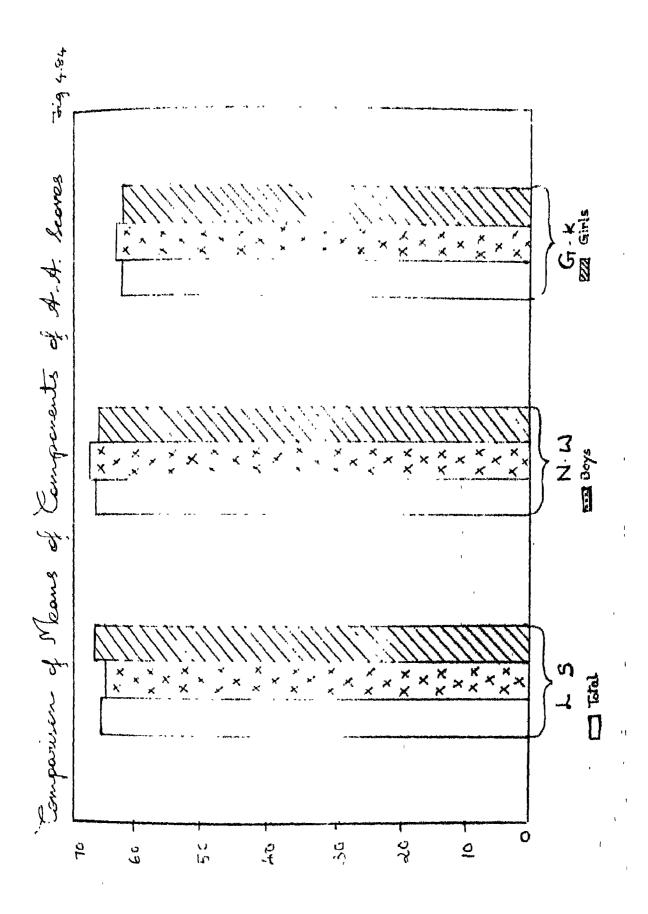
FIDUCIARY LIMITS OF Mean & SD OF P.C. SCORES FOR THE TOTAL SAMPLE

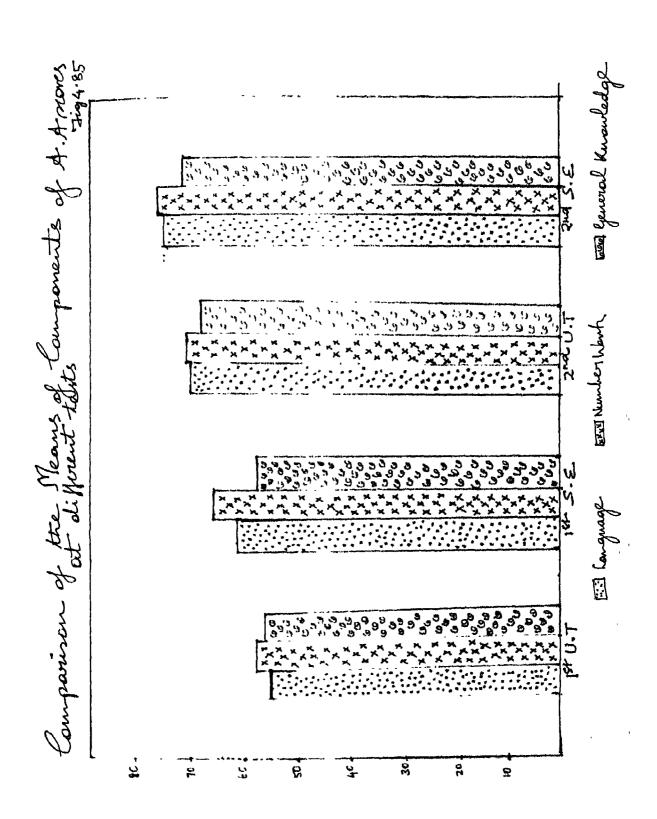
and the time that the said that the time the first the time the time the time the time the time time time the time time time time time time time tim	SP sayer reads birthy week Gazal Styl. Starth Order Galls. And of	منظ الحداد فيها عبدر الجداد الداء بيناء ويواد الجداد منها منها اليواد (بيان الداء الدواء اليواد الدواء الدواء ال	
Statistic	s.e.	.95	. 99
§) depty poor may reply using special place that they may apply using the	فالمراجعة المحافظة ال	على الله الله الله الله الله الله الله ال	الله المناسبية المن المن المناسبية المناسبية المناسبية المناسبية المناسبية المناسبية المناسبية المناسبية
Mean .	0.17	16.28 - 16.97	16.17 - 17.07
SD	0.12	2.66 - 3.15	2.58 - 3.22
و علية بالله الله الله الله الله الله الله الل		ينت جنون بيش هند جنوب سين نيس جنون جنون النائل وي النائل ا	

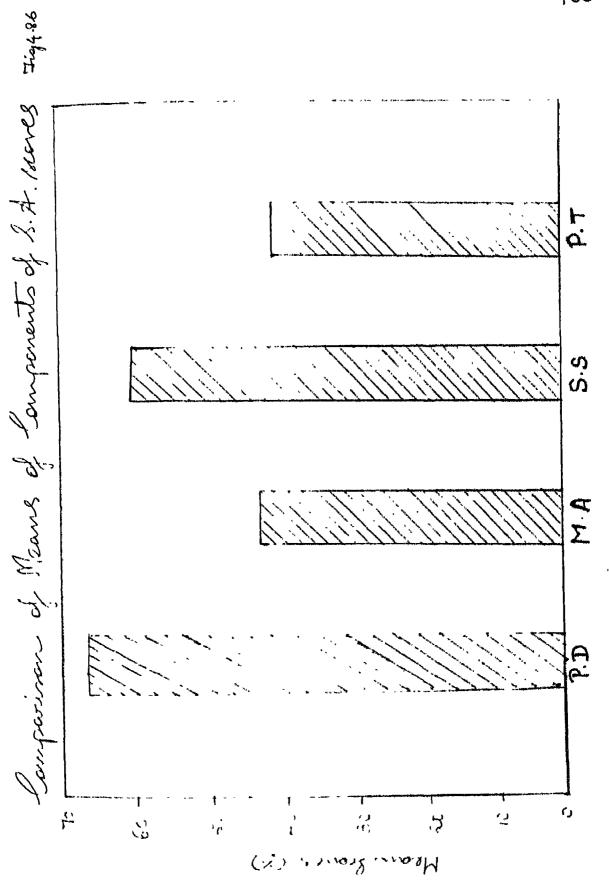
The Fiduciary limits of Mean & SD for the P.C. scores of the total sample have very narrow ranges indicating the dependability of the sample statistics.

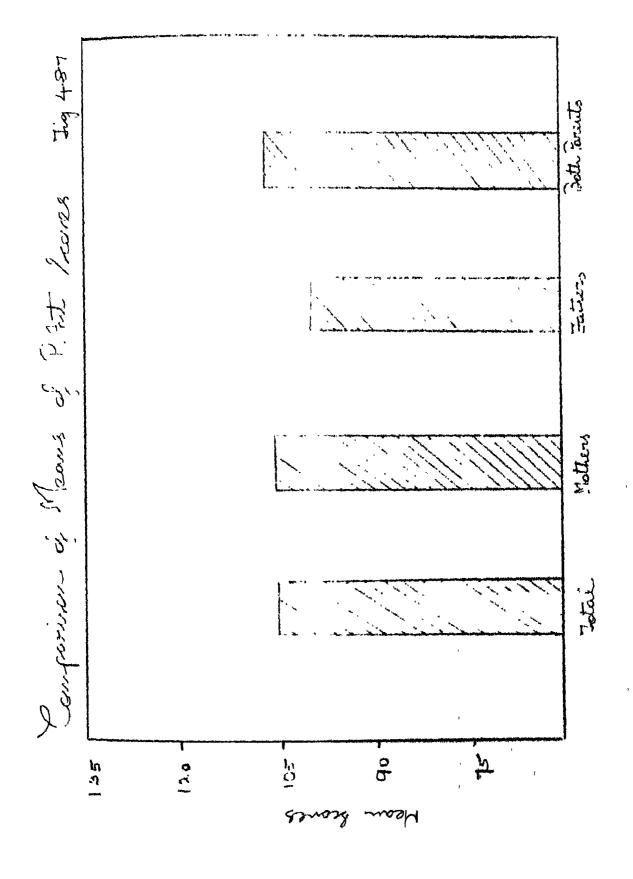












CHAPTER V

INFERENTIAL ANALYSIS

"Pare facts, objective data, never determine anything. They become significant only as interpreted in the light of accepted standards and assumptions, and these standards in the final analysis are not susceptible to scientific determination". In ordinary life we seldom deal with bare facts but facts interpreted. This interpretation or evaluation is determined by the purpose to which we relate the facts.

Analysis is a process which enters into research in one form or another from the very beginning. Inferential analysis refers to the testing of the hypotheses. It helps in making accurate inferences by adopting levels of significance. The levels of significance applied to this study are the .05 or .01.

Hypotheses: Hypotheses are formulated to explain observed facts and conditions and to serve as a guide in the research process. They are tentative guesses expressing certain

Sidhu S.K.: <u>Methodology of Research in Education</u>. New Delhi, Sterling Publishers Pvt. Ltd., 1985. pp. 274-275.

differences or relationships among variables. For present research, hypothesis have been formulated in the null form. A null hypothesis states that there will be no statistically significant differences or relationship between groups and among variables." The null hypothesis always identifies the population and comparison group involved, and always specifies the nature of the difference or the relationship to be tested and how it will be measured".1 Since hull hypothesis predict no difference or relationship between or among treatment groups, they are also known as non-directional hypothesis. Null hypothesis are easier to deal with statistically because it is easier to state within predictable limits of certainty about evidence that two groups are different or correlated did not occur by chance.

Jechniques Used For the Testing of Hypotheses

Testing of hypotheses requires the use of statistical techniques, which are broadly classified as carametric techniques and non-parametric techniques. Parametric techniques were adopted for the study as the data followed a normal distribution which can be observed in description of the data in Chapter IV and V.

Cates W.M.: A Practical Guide to Educational Research.

New Jersey, Prentice Hall, Inc. Englewood Cliffs. 1985.

Pp. 17 - 18.

In order to test the stated hypotheses in Chapter I, the following parametric techniques were employed. They are:

- 1. Correlation coefficient
- 2. Analysis of variance and
- 3. 't' test

Parametric statistical techniques

1. Product - moment coefficient of correlation.

The statistical technique used to find out the relationship between two variables is "coefficient of correlation" "r" is often called "Pearson r" after Professor Karl Pearson who developed the product - moment method. For computing "r" the data was arranged in a scattergram in which the "x" variable represents class interval scores of S.R. and "y" variable represents class intervals of scores of A.A.

The following formula was used for computing the coefficient of correlation i.e. "r"

$$r = \sum_{i=1}^{N} \frac{y^{1}}{N} - cx^{1} cy$$

$$-\frac{N}{\sigma^{1}x} \frac{1}{\sigma^{1}y}$$

Where $\Sigma x^{1}y^{1}$ = product of deviation from assumed mean of 'x' variable and the 'y' variable.

- ex correlation in units of intervals of 'x'
- cy = correlation in units of intervals of 'y'
 variable
- σ¹x = Standard deviation of the scores of 'x' variable,
- oly Standard deviation of the scores of 'y' variable.

Interpretation of 'r': The value of 'r' always lies between -1 and +1.

If 'r is found to be negative it suggests inverse relationship between two variables i.e. an increase in one variable is along with a decrease in the other variable.

If 'r' is zero then there is no relationship netween the two variables.

If 'r' is positive it suggests a direct relationship between the variables, i.e. an increase in one variable is along with an increase in the other variable.

The strength of association between variables can be decided on the basis of the following criteria given by J.W. Best.,

Best, J.W.: Research in Education. New Delhi, Prentice Hall of India Pvt. Ltd., (4th Edition 1983). p.255

Coefficient "r"	Relationship
0.00 to 0.20	Negligible
0.20 to 0.40	Low
0.40 to 0.60	Moderate
0.60 to 0.80	Substantial
0.80 to 1.00	High to very high

The significance of 'r' is then determined and interpreted with reference to the table values of 'r' for the corresponding degree of freedom 30%.

2. Analysis of Variance :

The analysis of variance introduced by Sir Ronald Fisher near the beginning of the twentieth century is widely used by behavioural and social scientists. As a class of statistical method "Anova" provides a means for analysing data that is both rigorous logically and mathematically and sufficiently broad to address questions, posed in a wide spectrum of investigations.

Analysis of variance is a statistical technique employed in testing hypotheses where significance of the difference between the several means is derived irrespective

¹ Kruskal, W.H., Tamvy, J.M. : International Encyclopedia of Statistics. Vol. I. N.Y. The Free Press. 1978. p.541.

ut the size of the sample.

The main function performed by Anova is to compare systematically the mean response levels of two or more independent groups of observations or of a set of observation measured at two or more points in time.

The test of significance provides a sample based decision as to whether this hypotheses is supported or refuted.

Analysis of variance is based on the breakdown of the total sum of squares into the sums of squares within the component distributions and between the means of the confining distributions. This technique provides overall test of several samples simultaneously and tells us whether any of the difference are significant.

F ratio is computed by using the following formula:

Mean square variance of among means of conditions

F = Mean square variance of within conditions

 $\frac{Interpretation}{of} \ \, \frac{f}{f} \ \, \frac{ratio}{ratio}: \ \, \text{The numerical value of F} \ \, \text{ratio}.$ thus obtained is compared with F values in "Table F", with

¹ Garrett, H.E.: <u>Statistics in Psychology and Education</u>. Toronto, Longmans Green and Company, 1985. pp.429-432.

degrees of freedom for "among means" and "within conditions".

If the obtained "F-ratio" is larger than the tabulated value of 1 at 0.01% or 0.05% levels, then F is said to be significant at 0.01% or 0.05% levels respectively. In such a case the null hypothesis is rejected. If the obtained F is smaller than the tabulated value of F, then F is said to be insignificant and the null hypothesis is accepted either at 0.05% or 0.01 level of significance depending upon the values obtained and tabulated F.

3. The 't' test or the Critical Ratio or 't' Ratio

When significance of the difference between two means is to be computed the 't' test is used. It involves the computation of the ratio between observed difference between two sample means and the sampling error factor.

The following formula is used for calculating the t-Test.

t =
$$\frac{M_1}{\sigma^2}$$
 + $\frac{M_2}{\sigma^2}$ + $\frac{\sigma^2}{\sigma^2}$ N N N 2

Where M₁ = Mean of the first group

M₂ = Mean of the second group

 σ_1 = Standard deviation of the first group

 σ_2 = Standard deviation of the second group

N = Sample size of the first group

1

N = Sample size of the second group 2

Interpretation of t: The critical ratio 't' for n-1 degree of freedom is found from Table D at 0.01% level. If the calculated 't' is greater than the tabulated 't' then the null hypothesis is rejected. Otherwise it is accepted.

As already mentioned the researcher has formulated a series of null hypotheses for proceeding with the study in a methodical manner. Those hypotheses expressing relationship are tested using correlational techniques, while the hypotheses comparing different categories of the sample are tested through the Anova F test.

The hypothesis are accepted or rejected on the Lanis of the obtained evidence being supportive or otherwise. They have been broadly categorised into 10 groups from A to J as follows:

A Group of Hypotheses

Hypotheses A.1 - A.5

The hypothesis of relationship between 8.R. and

the relationship between S.R. and A.A. at different tests (i.e. 1st Unit Test, 1st S.E., 2nd Unit Test, and 2nd S.E.) are also tested. These are obtained from the correlation coefficients which are presented in Table 5.1. On the basis of comparison with the critical value of 'r' at .01 level for the corresponding degrees of freedom, the significance is determined.

TESTING OF HYPOTHESIS OF RELATIONSHIP BETWEEN S.R. AND A.A.

The following table shows the correlation obtained between S.R. and A.A.:

CORRELATION MATRIX
SCHOLASTIC READINESS - ACADEMIC ACHIEVEMENT

	Total	A.A. at 1st U.T.	A.A. at ist S.E.	A.A. at 2nd U.T.	A.A. at 2nd S.E.
Total S.R.	0.46	0.64 ++++	0.51	0.37 ++	0.24
M.S.	0.39	0.59 +++	0.48 +++	0.34 ++	0.22 ++
r.s.	0.47	0.6B ++++	0.61	0.43 +++	0.33 ++
P.S.	0.41	0.62 ++++	0.56	0.39	0.26
C.E.L	. 0.49	0.71 ++++	0.59	0,41	0.37

monefficient """	Relationship	
a,00 to 0.20	Negligible	+
0.20 to 0.40	1. cow	**
0.40 to 0.60	Moderate	+++
0.60 to 0.80	Substantial	++++
0.80 to 1.00	High to very high	+++++

of 306

Significance of r at .05 = .148

Significance of r at .01 = .113

The significance of a relationship is determined on the basis of comparison with the critical values for the corresponding degrees of freedom.

Testing Hypothesis A.1.a

The null hypothesis Ala states that there is no significant relationship between S.R. and A.A. of Preschool children. The technique used in testing this hypothesis is the Product moment Co-efficient of Correlation.

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of S.R. and the 'y' variable represents the plass interval of scores of A.A. of P.S.C.. From the correlation Matrix presented in Table 5.1 the corefficient of correlation between S.R. and A.A. is read as 0.46. This value of 'r' is

elationship is rejected as the evidence is not supportive.

There is a significant, positive and moderate relationship between S.R. and A.A. of Preschool children.

Testing Hypothesis A.1.b

The null hypothesis A.1.b states that there is no significant relationship between S.R. and A.A. (at ist U.T.) of Preschool children. The technique used in testing this hypothesis is the Product moment co-efficient of Correlation.

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of S.R. and the 'y' variable represents the class interval of scores of A.A. (at 1st U.T.) of P.S.C.. From the correlation Matrix presented in Table 5.1 the co-efficient of correlation between S.R. and A.A. (at 1st U.T.) is read as 0.64. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore, the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant positive and substantial relationship between S.R. and A.A. (at 1st U.T.) of Preschool children.

Testing Hypothesis A.1.c

The null hypothesis A.1.c states that there is no significant relationship between S.R. and A.A. (at ist S.E.) of Preschool children. The technique used in testing this hypothesis is the Product moment co-efficient of correlation.

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of S.R. and the 'y' variable represents the class interval of scores of A.A. (at 1st S.E.) of P.S.C.. From the correlation matrix presented in Table 5.1 the co-efficient presented in Table 5.1 the co-efficient of correlation between S.R. and A.A. (at 1st S.E.) is read as 0.51. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of incedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive and moderate relationship between S.R. and A.A. (at ist S.E.) of Preschool children.

lesting Hypothesis A.1.d

The null hypothesis A.1.d states that there is no significant relationship between S.R. and A.A. (at 2nd U.T.) of Preschool children. The technique used in testing this hypothesis is the Product moment co-efficient of correlation.

The 'r' was computed by drawing a scattergram in which the 'x variable represents the class interval scores in S.R. and the 'y' variable represents the class interval of scores of A.A. (at 2nd U.T.) of P.S.C. From the correlation slatrix presented in Table 5.1 the coefficient of correlation between S.R. and A.A. (at 2nd U.T.) is read as 0.37. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive but low relationship between S.R. and A.A. (at 2nd U.T.) of Preschool buldren.

Testing Hypothesis A.1.8

The null hypothesis A.1.e states that there is

this hypothesis is the Product moment coefficient of

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of S.R. and 'y' variable represents the class interval of scores of A.A. (at 2nd S.E.) of P.S.C.. From the correlation Matrix presented in Table 5.1 the co-efficient of correlation hetween S.R. and A.A. (at 2nd S.E.) is read as 0.24. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive but low relationship between S.R. and A.A. (at 2nd S.E.) of Preschool children.

Conclusions and Discussions

On the basis of the analysis it can be uncluded that S.R. is positively correlated with A.A. The correlation is significant at every stage from 1st U.T. through to the 2nd S.E. On the whole too the relationship is positive and significant though moderate. However, it may

he observed that the relationship decreases gradually with every test from substantial at 1st Unit Test to low at 2nd This is heartening to note mince it is an indication S.L. that the child develops the skills necessary for A.A. as progresses through the months. But since the relationship is positive and significant though low even at the 2nd S.E. becomes important that the S.R. of the child be developed with special efforts. Appropriate programmes devised develop the S.R. of P.S.C. would enable them to perform better in school. It will also have a great bearing on their "self concept" because, if tasks are easy at school, the coping up becomes smooth and vice-versa. Secondly the S.R. would also develop a positive approach and attitude to school since the child would like to do things that are easy would like to avoid those tasks which are difficult. So. with the necessary S.R. as the tasks in the achool would become easy, the child would develop a positive attitude to This in turn would contribute to a favourable school. attitude to learning in general and the entire process of learning is looked upon conducively.

lesting Hypothesis A.2.a

The hypothesis A.2.a states that there is no significant relationship between Motor Skills and A.A. of preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of M.S. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. of P.S.C. is represented in the 'y' variable. As can be observed from the correlation Matrix presented in Table 5.1 the coefficient of correlation between M.S. and A.A. is read in 0.39. The critical value of 'r' for significance at .01 level is .148 for degrees of freedom 306. The obtained result does not support the hypothesis of no relationship. So the null hypothesis is rejected. The obtained 'r' denotes positive but at .01 level i.e. the more the scores in M.S. the higher are likely to be the scores in A.A.

There is a significant, low but positive relationship between M.S. and A.A. of Preschool children.

lesting Hypothesis A.2.b

The hypothesis A.2.b states that there is no significant relationship between M.S. and A.A. (at 1st U.T.) of preschool children. The null hypothesis was tested using the product moment coefficient of correlation technique. A scattergram was drawn to compute the 'r' where in the class interval scores of M.S. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. (at 1st U.T) of P.S.C. is represented in the 'y' variable.

As can be observed from the correlation Matrix presented in Table 5.1 the coefficient of correlation between M.S. and A.A. at 1st U.T. is read as 0.59. The critical value of 'r' for significance at .01 level is .148 for degrees of freedom 306. This result does not support the hypothesis of no relationship. So the null hypothesis is rejected. The obtained 'r' denotes positive, moderate relationship at .01 i.e. the more the scores in M.S., the higher are likely to be the scores in A.A.

There is a significant, positive and moderate relationship between M.S. and A.A. of Preschool Children.

Testing Hypothesis A.Z.c

The hypothesis states that there is no significant relationship between M.S. and A.A. (at 1st S.E.) of Preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of M.S. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. (at 1st S.E.) of P.S.C. is represented in the 'y' variable. As can be observed from the correlation Matrix presented in Table 5.1 the co-efficient of correlation between M.S. and A.A. (at 1st S.E.) is read as 0.48.

the degrees of freedom 306. This result does not support the hypothesis of no relationship. So the null hypothesis is rejected. The obtained 'r' denotes positive, moderate relationships at .01 level i.e. the more the scores in M.S., the higher are likely to be the scores in A.A.

There is a significant, positive and moderate relationship between M.S. and A.A. of Preschool children.

Testing Hypothesis A.2.d

The hypothesis A.2.d states that there is no significant relationship between M.s. and A.A. (2nd U.T.) of Preschool children. The null hypothesis was tested using the product moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of M.S. of P.S.C. is represented to the 'x' variable and the class interval scores of A.A. (at ind U.T.) of P.S.C. is represented in the 'y' variable. As can be observed from the correlation Matrix presented in lable 5.1 the coefficient of correlation between M.S. and A.A. (at 2nd U.T.) is read as 0.34. The critical value of 'r' for significance at .01 level is .148 for degrees of freedom 306. This result does not support the hypothesis of

no relationship so the null hypothesis is rejected. The obtained in denotes positive but low relationship at .01 level i.e. the more the scores in M.S., the higher are likely to be the scores in A.A.

There is a significant, positive but low relationship between M.S. and A.A. of preschool children.

Testing Hypothesis A.Z.e

The hypothesis A.2.e states that there is no significant relationship between M.S. and A.A. (at 2nd 6.E.) of Preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of M.S. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. (at 2nd S.E.) of P.S.C. is represented in the 'y' variable. can be observed from the correlation Matrix presented Table 5.1 the coefficient of correlation between M.S. and (at 2nd S.E.) is read as 0.22. The critical value of for significance at .01 level is .148 for degrees of freedom 306. This result does not support the hypothesis ۵f relationship. So the null hypothesis is rejected. The obtained 'r' denotes positive but low relationship i.e. the the scores in M.S., the higher are likely to the

scores in m.A.

There is a significant positive but low relationship between M.S. and A.A. (at 2nd S.E.) of preschool children.

Conclusions and Discussions

This analysis leads to the conclusion that M.S. is closely correlated with A.A. The correlation is positive and significant though low on the whole. It may be observed that the correlation varies from moderate at 1st U.T. to low at 2nd S.E. It may be surprising that the Motor skills seem to be an important factor contributing to the A.A. but it is the motor coordination and muscular control that helps the child acquire the reading-writing skills. Hence it is imperative that special concern may be shown while organising school curriculum and sessions for the pre-school children opportunities for development of Motor skills be and Sadly, it is just the reverse, the school routine included. escually never has any scope for development of motor muscular coordination. They are generally downward extension primary routine and pre-school children are with no activities, in over crowded, cramped classrooms.

With this finding it becomes obligatory that the school personnel give careful consideration to the Motor

fills of P.S.C. and plan the sessions with appropriate activities for enhancing the same. They should be graded properly and offered at the pace of the group they are catering to.

lesting Hypothesis A.3:

lesting Hypothesis A.J. a

The hypothesis A.3.a states that there is no significant relationship between cognitive skills and Academic Achievement, of Preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of C.S. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. of P.S.C. is represented in the 'y' variable. As can be observed from the correlation Matrix presented in Table 5.1 the coefficient of correlation between C.S. and A.A. is read as 0.47. The critical value of 'r' for significance at .01 level is .148 for degrees of freedom 306. This result does not support the hypothesis of no relationship. So the null hypothesis is rejected. The obtained 'r' denotes positive, moderate relationship at .01 level i.e. the more the scores in C.S., the higher are likely to be the scores in A.A.

There is a significant, positive and moderate relationship between C.S. and A.A. of Preschool children.

Testing Hypothesis A.3.b

The null hypothesis A.3.b states that there is no significant relationship between C.S. and A.A. (at ist U.T.) of preschool Children. The technique used in testing this hypothesis is the product moment coefficient of correlation.

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of C.S. and the 'y' variable represents the class interval of scores of A.A. (at 1st U.T.) of P.S.C.. From the correlation Matrix presented in Table 5.1 the coefficient of correlation between C.S. and A.A. (at 1st U.T.) is read as 0.68. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive and substantial relationship between C.S. and A.A. (at 1st U.T.) of preschool children.

Testing Hypothesis A.3.c

The hypothesis A.S.c states that there is no significant relationship between C.S. and A.A. (at 1st S.E.) of Preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of C.S. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. (at ist S.E.) of P.S.C. is represented in the 'y' variable. can be observed from the correlation Matrix presented in Table 5.1 the co-efficient of correlation between C.S. A.A. (at 1st S.E.) is read as 0.61. The critical value of 'r' for significance at .01 level is .148 for degrees treedom 306. This result does not support the hypothesis no relationship. So the null hypothesis is rejected. The obtained 'r' denotes positive, substantial relationship .01 level i.e. the more the scores in C.S., the higher are likely to be the scores in A.A.

There is a significant, positive and substantial relationship between C.S. and A.A. of preschool children.

Testing Hypothesis A.3.d

no significant relationship between C.S. and A.A. (at 2nd U.T.) of Preschool children. The technique used in testing this hypothesis is the product moment coefficient of correlation.

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of C.S. and the 'y' variable represents the class interval of scores of A.A. (at 2nd U.T.) of P.S.C.. From the correlation matrix presented in Table 5.1 the coefficient of correlation between C.S. and A.A. (at 2nd U.T.) is read as 0.43. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level and .148 respectively for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive but moderate relationship between C.S. and A.A. (at 2nd U.T.) of Preschool children.

Testing Hypothesis A.J.e

The hypothesis A.3.e states that there is no significant relationship between C.5 and A.A. (at 2nd S.E.) of Preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of C.S. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. (at 2nd S.E.) of P.S.C. is represented in the 'y' variable. As can be observed from the correlation Matrix presented in Table 5.1 the coefficient of correlation between C.S. and A.A. (at 2nd S.E.) is read as 0.33. The critical value of 'r for significance at .01 level is .148 for degrees of fleedom 306. This result does not support the hypothesis of relationship. So the null hypothesis is rejected. The obtained 'r' denotes positive but low relationship at .01 level i.e. the more the scores in C.S.the higher are likely to be the scores in A.A.

There is a significant positive but low relationship between C.S. and A.A. (at 2nd S.E.) of preschool children.

Conclusions and Discussions

The conclusion that emerges from the foregoing analysis is that there is a strong relationship between C.S. and A.A.. The correlation is significant, positive and moderate. However, the correlation decreases gradually from substantial at 1st U.T. to low at 2nd S.E. All the same, incompositive that cognitive skills are an important factor

influencing the A.A. of P.S.C.. Since, the correlation substantial to begin with attention should be paid to strengthening of these skills. The beginning stages of 'school experience are important in that the child's basic understanding and comprehension of various concepts take place. Not surprisingly these would lay the foundations for further understanding and absorption of knowledge. It then becomes important that if a child is weak in C.S. he may be compensated with such experiences and activities that his C.S. would automatically develop. This apart, strengthening of C.S. would also help him to develop a favourable selfimage and a positive attitude to schooling and learning. Many children from the underprivileged and the disadvantaged motivation lack the necessary stimulation and randucive for aptimum development of cognitive skills. careful planning of activities and experiences children would the able then to develop the necessary C.S.

lesting Hypothesis A.4

lesting Hypothesis A.4.a

The null hypothesis A.4.a states that there is no significant relationship between Psychosocial Skills and H.A. of Preschool children. The technique used in testing this hypothesis is the product moment coefficient of correlation.

which the variable represents the class interval scores of P.S. and the 'y' variable represents the class interval scores of A.A. of P.S.C.. From the correlation Matrix presented in Table 5.1 the coefficient of correlation between C.S. and A.A. is read as 0.41. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive but low relationship between P.S. and A.A. of Preschool children.

Testing Hypothesis A.4.b

The hypothesis A.4.b states that there is no significant relationship between P.S. and A.A. (at 1st U.T.) of Preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of P.S. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. (at U.T.) of P.S.C. is represented in the 'y' variable. As the observed from the correlation Matrix presented in

A.A. (at 1st Unit Test) is read as 0.62. The critical value of 'r for significance at .01 level is .148 for degrees of treedom 306. This result does not support the hypothesis of no relationship. So the null hypothesis is rejected. The obtained 'r' denotes positive, substantial relationship at .01 level i.e. the more the scores in P.S., the higher are likely to be the scores in A.A.

There is a significant positive and substantial relationship between P.S. and A.A. of preschool children.

Testino Hypothesis A.4.c

The null hypothesis A.4.c states that there is no significant relationship between P.S. and A.A. (at ist b.E.) of preschool children. The technique used in testing this hypothesis is the Product moment coefficient of correlation.

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of P.S. and the 'y' variable represents the class interval scores of A.A. (at 1st S.E.) of P.S.C.. From the correlation matrix presented in Table 5.1 the coefficient of correlation between P.S. and A.A. (at 1st S.E.) is read as 0.36. This

value of r is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive and moderate relationship between P.S. and A.A. (at 1st S.E.) of Preschool children.

Testing Hypothesis A.4.d

The hypothesis A.4.d states that there is no sugnificant relationship between P.S. and A.A. (at 2nd U.T.) of Preschool children. The null hypothesis was tested using the froduct moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of P.S. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. (at 2nd U.T.) of P.S.C. is represented in the 'y' variable. As can be observed from the correlation Matrix presented in lable 5.1 the coefficient of correlation between P.S. and A.A. (at 2nd U.T.) is read as 0.39. The critical value of 'r' for significance at .01 level is .148 for degrees of freedom 306. This result does not support the hypothesis of no relationship. So, the null hypothesis is rejected. The

interned 'r denotes positive, low-relationship at .01 level i.e. the more the scores in P.S., the higher are likely to the scores in A.A.

There is a significant, positive but low relationship between P.S. and A.A. of Preschool children.

lesting Hypothesis A.4.e

The null hypothesis A.4.e states that there is no significant relationship between P.S. and A.A. (at 2nd S.E.) of Preschool children. The technique used in testing this hypothesis is the Product moment coefficient of correlation.

The 'r' was computed by drawing a scattergram in which the 'k' variable represents the class interval scores of P.S. and the 'y' variable represents the class interval scores of A.A. (at 2nd S.E.) of P.S.C. From the correlation Matrix presented in Table 5.1 the coefficient of correlation between P.S. and A.A. (at 2nd S.E.) is read as 0.26. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for segrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive but low relationship between P.S. and A.A. (at 2nd S.E.) of preschool tildren.

Conclusions and Discussions

the foregoing analysis it becomes evident that P.S. and A.A. are significantly correlated. relationship is positive but low on the whole. It fluctuates from substantial at 1st U.I. to low at 2nd S.E. This implies that Psychosocial skills are important for A.A. P.S.C. is the responsibility of the educators then plan the programme in such a manner that there is ample scope for strengthening his P.S. The school entrance itself is a traumatic experience producing a lot of anxiety in the child. When a child enters school with the necessary Psychosocial "kills he then somehow manages to cope up with the growing expectations of school. The situation becomes difficult for children who do not possess the necessary P.S. Considering the importance of P.S. in establishing rapport and settling down to school routine it becomes important that due concern be shown in helping children develop "Hill in Psychosocial area. Apart from helping him to take the tasks expected of him he would get a smooth start. would also enable him to develop a favourable attitude to school and its routine.

Testing Hypothesis A.5

Testing Hypothesis A.5.8

The hypothesis A.5.a states that there is no significant relationship between Comprehension of English Language and Academic Achievement of Preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique.

A scatteryram was drawn to compute the 'r' where in the class interval scores of C.E.L. of P.S.C. is represented in the x' variable and the class interval scores of A.A. of P.S.C. is represented in the 'y' variable. As can be observed from the correlation Matrix presented in Table 5.1 the coefficient of correlation between C.E.L. and A.A. is read as 0.49. The critical value of 'r' for significance at .01 level is .148 for degrees of freedom 306. This result does not support the hypothesis of no relationship. So the mult hypothesis is rejected. The obtained 'r' denotes positive, moderate relationship at .01 level i.e. the more the scores in C.E.L., the higher are likely to be the scores in A.A.

There is a significant, positive but moderate relationship between C.E.L. and A.A. of Preschool children.

lesting Hypothesis A.5.b

The null hypothesis A.5.b states that there is no significant relationship between C.E.L. and A.A. (at ist (I.T.) of Preschool children. The technique used in testing this hypothesis is the Product moment coefficient of correlation.

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of C.E.L. and the 'y' variable represents the class interval scores of A.A. (at 1st U.T.) of P.S.C.. From the correlation Matrix presented in Table 5.1 the coefficient of correlation between C.E.L. and A.A. (at 1st U.T.) is read as 0.71. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive and a substantial relationship between C.E.L. and A.A. (at ist U.J.) of Preschool children.

Testing Hypothesis A.5.c

The hypothesis A.S.c states that there is no significant relationship between C.E.L. and A.A. (at 1st

i.E.) of Preschool children. The null hypothesis was tested technique.

A scattergram was drawn to compute the 'r' where in the class interval scores of C.E.L. of P.S.C. is represented in the 'x' variable and the class interval scores of A.A. (at 1st S.E.) of P.S.C. is represented in the 'y' variable. As can be observed from the correlation Matrix mesented in Table 5.1 the co-efficient of correlation metween C.E.L. and A.A. (at 1st S.E.) is read as 0.59. The ritical value of 'r' for significance at .01 level is .148 for degrees of freedom 306. This result does not support the hypothesis of no relationship. So the null hypothesis is rejected. The obtained 'r' denotes positive, moderate relationship at .01 level i.e. the more the scores in C.E.L., the higher are likely to be the scores in A.A.

There is a significant, positive and moderate relationship between C.E.L. and A.A. of preschool children.

lesting Hypothesis A.S.d

The null hypothesis A.S.d states that there is no significant relationship between C.E.L. and A.A. (at 2nd U.T.) of Preschool children. The technique used in testing this hypothesis is the Product moment coefficient of

garrelation.

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of C.E.L. and the 'y' variable represents the class interval scores of A.A. (at 2nd U.T.) of P.S.C.. From the correlation matrix presented in Table 5.1 the coefficient of correlation between C.E.L. and A.A. (at 2nd U.T.) is read as 0.41. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null expothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive but low relationship between C.E.L. and A.A. (at 2nd U.F.) of Preschool Children.

'esting Hypothesis A.5.e

The hypothesis A.5.e states that there is no significant relationship between C.E.L. and A.A. (at 2nd S.E.) of preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique.

A scattergram was drawn to compute the 'r' where

the class interval scores of C.E.L. of P.S.C. represented in the 'x' variable and the class interval scores of A.A. (at 2nd S.E.) of P.S.C. is represented in the v' variable. As can be observed from the correlation Matrix presented in Table 5.1 the coefficient of correlation between C.E.L. and A.A. (at 2nd S.E.) is read as 0.32. The critical value of 'r' for significance at .01 level is .148 degrees of freedom 306. This result does not support the hypothesis of no relationship. So the null hypothesis The obtained 'r' denotes positive. 100 relationship at .01 level i.e. the more the scores C.E.L., the higher are likely to be the scores in A.A.

There is a significant positive but low relationship between C.E.L. and A.A. of preschool children.

Lanctusions and Discussions

The conclusion that emerges from the above analysis is that there exists a strong correlation between C.C.L. and A.A. It is positive significant and moderate on the whole and is highest compared to all the other components it is.R. The correlation all the same decreases from shiftential at 1st U.T. to low at 2nd S.E. This is not very surprising since comprehension of the English language seems to be a fundamental requirement as the medium of instruction is English. Hence if the necessary C.E.L. is present,

indertaking the school tasks become smooth and easy. The init would be able to feel comfortable as he is familiar with the words that are spoken and is able to grasp what is being told. When the requisite C.E.L. is not present the child apart from having difficulty in following what is happening in school would also tend to drift away from it.

This then implies that, special care must be taken in this regard and children be helped in the area. Since most of our children come from homes where no English is spoken or used and unfortunately our schools barring a handful follow English as the medium of instruction, graded sessions be organised to improve language, particularly finglish. This would immensely benefit in improving the scores in A.A.

General Conclusions

On the whole it may be concluded that S.R. is significantly though moderately correlated to A.A., the magnitude of relationship decreases with time though, that is, it is substantial at 1st U.T. to begin with and decreases gradually with every test, to low at 2nd S.E. All the four components of S.R. are significantly correlated though in varying degrees. Of these the correlation of C.E.L. is highest, followed closely by C.S. The lowest correlation is

between M.S. and A.A. Another observation that emerges that though at every test the correlation is highest between C.E.L. and A.A. the correlation of C.S. and A.A. on the whole is higher than all other components including C.L.L. i.e. correlation between C.E.L. and A.A. at every test is higher than C.S. but on the whole the correlation between C.S. and A.A. is higher than C.E.L.

L (Houp of Hypotheses

hyputheses B1-B5

This group of hypotheses deals with the differential distribution of A.A. amongst the various levels of S.R. scores obtained by P.S.C.

The differences in the means of A.A. for the three categories are tested using Anova and the significance is tested at .05 level, or at .01 level.

The scores obtained in S.R. were arranged in descending order and the top 27% and the bottom 27% were taken as High scorers and Low scorers in S.R. The remaining middle group was put in the category of Moderate Scorers. Thus there were three categories obtained.

High scorers

Moderate scorers and

Low scorers in S.R. and their components.

TESTING OF HYPOTHESES OF DIFFERENCE IN A.A. ON THE BASIS OF LEVELS OF S.R.

Testing Hypothesis B.1.a

there is no significant difference in the A.A. of Preschool children with different levels of S.R. The difference among the means of A.A. of children with different levels of S.R. 1s tested for significance using the ANOVA.

The criterion used for classifying the scores of the A.A. of children was on the basis of different levels of S.R. scores obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.2

SUMS OF SQUARES & MEAN VARIANCES

. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					
Source	df	Sums of Squares	Mean Squares	F	
Hetween Groups	2	23017.38	11508.69	13.14	
Within Conditions	27	23642.09	875.63		

The value of F which is significant isignificance for F at .05 level 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of A.A. Hence the hypothesis is rejected. There is a significant difference in the A.A. of children with different levels of S.R.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDs OF A.A. OF CHILDREN WITH
DIFFERENT LEVELS OF S.R.

	اسد تمایار بریس وسید منجه اسب یافات باشد سبور اسان	، سند هـــ سند مثله فيما هيد ليبد مند فاند			
Group	M	SD	SED	t	Level of Bignificance
High S.R.	218.35	28.05	13.02	3.72	Big. at .01
Moderate S.R.		30.14			
High S.R.		28.05	14.07	4.64	Sig. at .01
Low S.R.		34.54			
Moderate S.R.		30,14	14.47	1.16	Nat Sig
Low S.R.	152.98	34.54		د اناب شد نجار وبدر وبن کور	للقبيغ شبيش بيلوب سنت يستيل فاشت طراق جنس سندار باشاق نينات خطية

Significance of 't' at .05 level 2.04 and at 0.01 level 2.77 for df 2, 27.

The 't' value for the difference between means of A.A. of High and Moderate groups is 3.72 which is significant.

The 't' value for the difference between High and Low Groups
in their A.A. is 4.64. This value of 't' is significant.

the 't' value for difference in means of A.A. for Moderate and low groups is 1.16 which is not significant.

Louting Hypothesis B.1.b

Hypothesis B.1.b in the null form states that there is no significant difference in the A.A. of Preschool children with different levels of M.S. The difference among the means of A.A. of children with different levels of M.S. is tested for significance using the ANOVA.

The criterion used for classifying the scores of the A.A. of children was on the basis of different levels of M.S., obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.4

SUMS OF SQUARES & MEAN VARIANCES

and whip that their the him the	n 1985 game rejecu Pilgori (Pir: Nobe, JAA 1867) gadri n	نظر والما المال الما - المال		والم المام والم المام والمام والم	ياتو پوت رهم دي جوړ کان کند
Source	df	Sums of Squares	Mean	Squares	F
Between Groups	2	15765.27	7882	.63	andis Steen mark about Shippy of Physic
Within Conditions	27	18676.10	691	.71	11.40
		ware that gives gare on their stage street with head street street on street was page to we wish stage		مرب کند بازاد بنده دیرا هم کان داد	

The value of F is significant (significance for at .05 level = 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of A.A. Hence the hypothesis is rejected. There is a significant difference in the A.A. of children with different levels of M.S.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the unitical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDS OF O.A. OF CHILDREN WITH
DIFFERENT LEVELS OF M.S.

the state of the s	and the the shift of the same group has an		ared gant made start From 1625 State part part		المراج والمراج والمراج المراج
Group	М	SD	SED	t	Level of Significance
High M.S.	206.00	28.83	12.26	3.04	Sig. at .01
Moderate M.S.	168.70	25.93			
High M.S.	206.00	28.83	13.48	4.08	51g. at .01
low M.S.	151.00	31.40			
Moderate M.S.	168.70	25.93	12.88	1.37	Not Sig.
Low M.S.	151.00	31.40	من المن المن المن المن المن المن المن ال		واران ويشر بيون جان مان هيپ وهي النان هيپ وهي آلان

Significance of 't' at .05 level = 2.04 and at 0.01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of A.A. of High and Moderate is 3.04 which is significant.

The 't' value for the difference between High and Low in their A.A. is 4.08. This value of 't' is significant.

The 't' value for difference in means of A.A. for Moderate and Low levels is 1.37 which is not significant.

resting Hypothesis B.1.c

Hypothesis B.1.c in the null form states that

there is no significant difference in the A.A. of Preschool children with different levels of C.S. The difference among the means of A.A. of children with different levels of C.S. is tested for significance using the ANOVA

The criterion used for classifying the scores of the A.A. of children was on the basis of different levels of C.S. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.6
SUMS OF SQUARES & MEAN VARIANCES

		الله المراق الم		
Source	df	Sums of Squares	Mean Squares	F
Retween Groups	2	20640.60	10320.30	7.70
Within Condition≤	27	36209.70	1341.10	
**		به جرور مساد جرور چون خوان کامل امراد جری انگیار شای جرای شد. باشد جری بروی شدن شهرد بیشان سرد جرور جرو		

The value of F is significant (significance for F at .05 level = 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of A.A. Hence the hypothesis is rejected. There is a significant difference in

ine A.A. of children with different levels of C.S.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.7

MEANS & SDS OF A.A. OF CHILDREN WITH

DIFFERENT LEVELS OF C.S.

firoup	М	SD	SED	t	Level of Significance
High C.S.	226.1	29.02	15.13		Sig. at .01 level
Moderate C.S.	182.6	38.05			to the time rate of the time are deal and the time and
High C.S.		29.02	16.31		Sig. at .01 level
•	163.4	42.62		ي سن جن جن من من من من	يقيل مين جوي بنده شدة اسم حديد جين حين سيد سيد سيد الله ش
Moderate C.S.		38.05	18.07	1.06	Not Sig.
Low C.S.	163.4	42.62			

Significance of 't' at .05 level = 2.04, at .01 level = 2.77 for dt 2,27 .

The 't' value for the difference between means of A.A. of High and Moderate is 2.87 which is significant.

The 't' value for the difference between High and Low in their A.A. is 3.85. This value of 't' is significant.

The 't' value for difference in means of A.A. for Moderate and Low levels is 1.06 which is not significant.

lesting Hypothesis B.1.d

Hypothesis B.1.d in the null form states that there is no significant difference in the A.A. of Preschool children with different levels of P.S.. The difference among the means of A.A. of children with different levels of P.B. is tested for significance using the ANDVA.

The criterion used for classifying the scores of the A.A. of children was on the basis of different levels of P.S. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.8

SUMS OF SQUARES & MEAN VARIANCES

A A - There has write fight areas to be false (thing or		منيه ويلي ويهل فيض فيم فيه فيه واله مينه فيم الجهر بين فيم فيم فيم والم والم والم	س اسی بالدر بیش میت است بیس منت باشد بسر میت منبه آمن نیس است	
Source	df	Sums of Squares	Mean Squares	F
Between Groups	2	17676.07	8338.03	6.06
Within Conditions	27	39359.80	1457.77	

The value of F which is 6.06 is significant isignificance for F at .05 level = 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of

 $_{\rm He}$ A. Hence the hypothesis is rejected. There is a significant difference in the A.A. of children with different levels of P.S.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.9

MEANS & SDS OF A.A. OF CHILDREN WITH

DIFFERENT LEVELS OF P.S.

,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	~	~~			ألب شير يون 100 من جوا جوا الدن جود رييه يات بول جون عين سر
Group	M	SD	SED	t	Lavel of Significance
High P.S.	208.7	36.32	17.08	2.61	Sig. at .05 level
Moderate P.S.	164.2	39.95		العد ذرية كثبة هية عبد بيب عبد ع	
High P.S.	208.7	36.32	17.49	3.23	Sig. at .01 level
Low P.S.	152.3	41.69			الأنام مينة البلغة العام الرائب وجوا ويونه البيئة الكنت الإنتان أسمل ويست ومراء
Moderate P.S.		39.95	18.26	0.65	Not Sig.
low P.S.	152.3	41.69	parks many priors where Maybe global priors group garder Manual Re-	ومن ويدن ويون عند ويون ويدر وي	شاملة الدول والجام النائب الجامة مدينة مسمو موميا بيون برسان إنساق يداعي باردي.

Significance of 't' at .05 level = 2.04, at .01 level = 2.77.

The 't' value for the difference between means of A.A. of High and Moderate is 2.61 which is significant at .05 level. The 't' value for the difference between High and Low in their A.A. is 3.23. This value of 't' is significant.

The 't value for difference in means of A.A. for Moderate and Low levels is .65 which is not significant.

Testing hypothesis B.1.e

Hypothesis B.1.e in the null form states that there is no significant difference in the A.A. of Preschool children with different levels of C.E.L.. The difference among the means of A.A. of children with different levels of C.E.L. is tested for significance, using the ANDVA.

The criterion used for classifying the scores of the A.A. of children was on the basis of different levels of C.E.L. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.10
SUMS OF SQUARES & MEAN VARIANCES

** **********	- 1904 - 1976 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984 - 1984	ويا البور ويون فالله ويهم المهم ويهم فيهم البات مناه والان المناه ويما ويما ويما المناه ويما ويما المناه المنا	ة جُمَانُ وَبُهِ مَشَادُ مَنِينَ فِينَا فِينَا فِينَا فَيْنَا فَيْنَا فَيْنَا مِنْنَا هَانِهِ بِهِا	
Source	df	Sums of Squares	Mean Squares	F
Between Groups	2	36498.60	18249.30	13.69
Within Conditions	27	35990.10	1332.97	

The value of F which is 13.69 is significant (significance for F at .05 level = 3.35 and .01 level = 5.49 for df 2. 27). The obtained evidence does not support the null hypothesis of no significant difference among means of A.A. Hence the hypotheses is rejected. There is a significant difference in the A.A. of children with different levels of C.E.L.

As F has emerged significant it is necessary to i.eat the data to further process of testing. So, the rritical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDS OF A.A. OF CHILDREN WITH
DIFFERENT LEVELS OF C.E.L.

e and have have the transition of the latest being being grade at				ے ہیں سے جی _{جی} سے میں جی میں	
Group	M	SD	SED	t	Level of Significance
High C.E.L.	228.9	22.19	14.47	3.92	Sig. at .01
Moderate C.E.L.		40.02			
High C.E.L.		22.19	16.80	4.98	Sig. at .01
ON C.E.L.		48.27			
Moderate C.E.L.		40.02	19.83	1.36	Not Sig.
Low C.E.L.		48.27	** ** ** **	مارند والله والله والله الماري والله والله والله والله والله	منت منت عليم البات ا

The significance of 't' at .05 level = 2.04 , at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of A.A. of High and Moderate groups is 3.92 which is significant at .01 level.

the 't' value for the difference between High and Low groups in their A.A. is 4.78. This value of 't' is significant at 101 level.

The 't' value for difference in means of A.A. for moderate and Low levels is 1.36 which is not significant.

Conclusions and Discussions

The analysis of the results lead to the following conclusions - the high scorers in S.R. score high in A.A. and vice versa. This could be because being more ready scholastically they tend to be better equipped to meet the demands of the school better and thus cope with The high scorers in S.R. differ significantly in their scores compared to the Moderate and Low scorers. But moderate S.R. scorers do not seem to differ significantly in their A.A. scores from the Low S.R. scorers. The pattern can be observed with all the components of Hence it can be surmised that S.R., and A.A. are closely ansuclated with each other.

TESTING OF HYPOTHESES OF DIFFERENCE IN L.S. ON THE BASIS OF LEVELS OF S.R.

Testing Hypothesis B.2.a

Hypothesis B.2.a in the null form states that there is no significant difference in the L.S. of Preschool children with different levels of S.R. The difference among the means of L.S. of children with different levels of S.R. in tested for significance using the ANOVA.

The criterion used for classifying the scores of the L.S. of children was on the basis of different levels of S.R. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the nurpose of computing Anova.

TABLE 5.12
SUMS OF SQUARES & MEAN VARIANCES

		ين چين جين جين ايني جين مين اعتلا جين مين مين مين جين آخل جين اعتلا جين		A 444 CH 444 CD 444 CD
Source	df	Sums of Squares	Mean Squares	F
		والمراف والراق بالمراف المراف المراف المراف المرافع المرافع المرافع والمرافع والمرافع والمرافع المرافع المرافع والمرافع والمرافع المرافع والمرافع المرافع المرافع والمرافع المرافع والمرافع والمرافع المرافع والمرافع والمر	به کنی شدن شد این بدن چیز سد وی نیبر سه شد بدر بدر این	
Between Groups	2	2248.20	1124.10	7.16
Within Conditions	27	4237.02	156.93	/ # 14
			نه الحدة البائد المدان المائد	

The value of F which is 7.16 is significant (significance for F at .05 level = 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of i.S. Hence the hypothesis is rejected. There is a significant difference in the i.S. of children with different levels of S.R.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDS OF L.S. OF CHILDREN WITH

DIFFERENT LEVELS OF S.R.

Group	M	SD	SED	t	Level of Significance
High S.R.	72.13	11.78	5.43	2.93	Sig. at .01
Moderate S.R.		12.49			
High S.R.		11.78	5.59	3.60	Sig. at .01
LOW S.R.	52.03	13.18			
Moderate S.R.	56.23	12.49	5.74	0.73	Not Sig.
Low S.R.		13.18			

Significance of 't' at .05 level 2.04, at .01 level 2.77 for df 2,27.

The 't' value for the difference between means of L.S. of High and Moderate groups is 2.93 which is significant.

The 't' value for the difference between High and Low groups in their L.S. is 3.60. This value of 't' is significant.

the 't' value for difference in means of L.S. for Moderate and Low groups is .73 which is not significant.

lesting Hypotheses B.2.h

The null hypothesis B.2.b states that there is significant difference in the L.S. of pre-school children with different levels of M.S. The technique used to test the hypothesis is the one way classification of analysis of variance (ANDVA)

The scores of M.S. obtained by children at different levels were used as criterion to classify the L.S. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.14

SUMS OF SQUARES & MEAN VARIANCES

با النبا من کند جمع باحد بند بند کا حبر حد وجو بند.	سيد والله عليك عبيد مدة إنساق البلية عامر ولكن بالمد عامد ولك ي	والمساور والمراور	منت رسم بيس كري يبان يغزم مين عمل سنة للمه الين مانه يعلل الله	
Source	df	Sums of Square	Mean Square	F
and the last of the Cal Mark		و سوم ميس بياس لينت لين مين دين مين يون يون يون يون دين مين مين وين سين وين وين وين وين وين وين وين		
Between Groups	2	1357.87	678.93	
				4.15
Within Conditions	21	4417.50	163.61	
n management of a second	Des agent as to aggregate our style deley for the state per per	a kina lital kare 😅 pani. Nan alau gara yang 🛶 pani dana bela papa kahi aya saga saga sa	المد در به مامه عدد کلید نابد همه همه پیش پیش به ماه عرب عبد ا	معيد عبيه ليني عبدر 1000

The F value for the difference among means of L.S. of High, Moderate and Low groups is 4.15 which is aignificant at .05 level (significance of F at .05 level = 3.35 and at .01 level = 5.49 for df 2 and 27). Therefore, the null hypothesis of no significant difference among means does not stand tenable at .05 level. There is a significant difference among the High, Moderate and Low groups in their L.S.

As the F ratio refutes the null hypothesis, the 't' test is applied to find out which of the differences is significant.

MEANS & SDs OF L.S. OF CHILDREN WITH
DIFFERENT LEVELS OF M.S.

TABLE 5.15

Group	М	SD	SED	t	Level of Significance
High M.S.	67.9	11.32	5.54	2.24	Sig. at .05
Muderate M.S.	57.5	13.37			TAAET
High M.S.	67.9	11.32	5.63	2.77	Sig. at .01
Luw M.S.	54.3	13.75			1 # A G T
Muderate M.S.	57.5	13.27	6.07	0.53	Not Sig.
ow M.S.	54.3	13.75	- دو سال می سال سال	عد عب جي بيده جب	

Significance of 't' at .05 level 2.04, at 0.01 level 2.77 for df 2, 27.

The 't' value for the difference between means of L.S. of High and Moderate groups is 2.24 which is significant at .05 level.

The t'value for the difference between High and Low groups in their L.S. is 2.77. This value of 't' is significant at both levels.

The 't' value for difference in means of L.S. for Moderate and Low levels is 0.53 which is not significant.

Jesting Hypothesis B. Z.c.

Hypothesis B.2.c in the null form states that there is no significant difference in the L.S. of Preschool children with different levels of C.S. The difference among the means of L.S. of children with different levels of C.S. is tested for significance using the ANOVA

The criterion used for classifying the scores of the L.S. of children was on the basis of different levels of C.S. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.16
SUMS OF SQUARES & MEAN VARIANCES

~~~~~~~~		على هما هما جماد الله الماد فيت المن الماد	من سند نسب نبت ميد کياره نوم ولند نيس پيم باده سند سيد سيد سيد بيد.	
Source	đf	Sums of Squares	Mean Squares	æ
Retween Groups	2	2006.47	1003.23	6.20
Within Conditions	27	4366.50	161.72	0.20
		والمراجعة	شاه سيف وهن وجهر وياد شده عجم دهن جمع منهه وكد وعثم وجهر عمله والم	

The value of F which is 6.20 is significant

(significance for f at .05 level = 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of L.S. Hence the hypothesis is rejected. There is a significant difference in the L.S. of children with different levels of C.S.

As F has emerged significant it is necessary to treat the data to further process of testing. So the, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDS OF L.S. OF CHILDREN WITH
DIFFERENT LEVELS OF C.S.

	the suffer made with their state over the state of the st				الوط الأميا بين بين هجم البارة الدين بياده هجم بيسا اليب الدي ياس
Group	M	SD	SED	t	Level of Significance
High C.S.	71.4	11.57	5.68	2.68	Sig. at .01
Moderate C.S.		13.72			
High C.S.		11.57	5.79	3.26	Sig. at .01
LOW C.S.		14.21			
Moderate C.S.		13.72	6.25	0.59	Not Sig.
Low C.S.	52.5	14.21			كالما والما والما المارة عبدية فدات لمارة فيات المارة فيارة فيارة فيارة المارة

Significance of 't' at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of L.S. of High and Moderate groups is 2.68 which is significant.

The 't' value for the difference between High and Low groups in their L.S. is 3.26. This value of 't' is significant.

The 't' value for difference in Means of L.S. for Moderate and Low levels is .59 which is not significant.

### lesting Hypothesis B.2 d

The null hypothesis B.2.d states that there is no significant difference in the L.S. of Preschool children with different levels of P.S. The technique used to test the hypothesis is the one-way classification of analysis of variance (ANOVA)

The ocores of P.S. obtained by children at inferent levels were used as criterion to classify the L.S. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

FABLE 5.18
SUMS OF SQUARES & MEAN VARIANCES

والمراضعة المراجعة ا	ner age come to contract the transmitted of	و چين چين د و د د د د د د د د د د د د د د د د د	الكرافية ثاق بني تابة لها، وبد ماء يوا منط تنبي ابن جها اشط تنبر بداء الجا الجا 300 أمّا
HULLINGE	df	Sums of Square	Mean Squares F
		و جنور وبيق خليق هنان بعث على جندر ويون بودة أهنا عندا حند هند بايال 1950 (1951 عند العبار عالم ال	کار چین بدند جی پشد سید پیچ پیدا کنت شعر شدر سی کی شد بدن بیدا است بی باشد نیس باشد این باشد دارد با
Between Groups	2	2006.47	1003.23
			5. <del>9</del> 8
Within Lunditions	27	4530,20	167.79
		المحتمد منتهد المنتفي المنتب المنتفذ المؤلفة وليباء درسه منتب شهين يؤلف والمثن أمين المنت المنتف المنتف	كالت لحد يواد جنها بهذا للناء جائز لهاة بناء جاءا يناه كال الكاء الله عليا الله الله الله الله الله

The F value for the difference among means of L.S. of High, Moderate and Low Groups is 5.98 which is significant (significance of F at .05 level = 3.35 and at .01 level = 5.49 for df 2, 27). Therefore the null hypotheses of the significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low groups in their L.S.

As the F ratio refutes the null hypothesis, the it test is applied to find out which of the differences is significant.

MEANS & SUS OF LIST OF CHILDREN WITH

TABLE 5.19

ar yan had distance of the house of the same of		·	ा ता करक्का स्वयंत्र स्थल क	THE ME A TANK AND	ra 1990-1986 - sait pank 4-1 - da - ya ee keesy 6-4 - 1994 - name Millis
Group	M	SD	SF.D	t	Level of Significance
High P.S.	71.7	12.00	5.88	2.59	Sig. at .05
Moderate P.S.	56.5	13.5			rever
High F.S.	71.7	12.08	5.99	3.16	Sig. at .01
Low P.S.		14.00			16061
Moderate P.S.		13.5	6.15	0.60	Not Sig.
Low P.S.	52.8	14.00	man (A) g to an article see to start to	ا د در استال البورو والا العالم (در الدوار	والمستور بالمراج مراجع والمدر والمعرب مراجع والمستورة والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع

Significance at .05 level 2.04, .01 level 2.77 for df 2,27.

The 't' value for the difference between means of L.S. of High and Moderate groups is 2.59 which is significant at .05 level.

The 't' value for the difference between High and Low groups in their L.S. is 3.16. This value of 't' is significant.

The 't' value for difference in means of L.B. for Moderate and Low levels is 0.60 which is not significant.

# Issting Hynothesis B.2.e

Hypothesis B.2.e in the null form states that there is no significant difference in the L.S. of Preschool children with different levels of C.E.L.. The difference among the means of L.S. of children with different levels of C.E.L. is tested for significance using the ANDVA.

The criterion used for classifying the scores of the L.S. of children was on the basis of different levels of C.E.L. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.20
SUMS OF SQUARES & MEAN VARIANCES

		والمراجع والم		
Source	df	Sums of Squares	Mean Squares	and the same and the same
Between Groups	2	2897.67	1448.93	
Within Conditions	27	4575.50	169.46	8.55
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The value of F which is 8.55 is significant (significance for F at .05 level = 3.35 and .01 level = 5.49

oull hypothesis of no significant difference among means of the Hence the hypothesis is rejected. There is a significant difference in the L.G. of children with different toyeds of C.E.L..

As F has emerged significant it is necessary to treat the data to further process of testing. So, the initial ratio test was applied to find out which of the 3 interences is significant.

MEANS & SDS OF U.S. OF CHILDREN WITH
DIFFERENT LEVELS OF C.E.L.

Group	M	SD	SED	t	Level of Significance
High C.E.L.	71.9	11.32	5.52	3.01	Sig. at .01 level
Moderate C.E.L.	55.3	13.30			
High C.E.L.	71.9	11.32	5.93	3.95	Sig. at "Oi level
low C.E.L.	40.5	14.93			الله الله الله الله الله الله الله الله
Moderate C.E.L.	55,3	13.30	6.32	1.08	Not Sig.
low C.E.L.	48.5	14.93	ه حادث الثالثة الثانية بالبعد اللحدة الراجع الباتان المثال إحداد		سيد ويدن باران داخل ويدن عبدا عليه باران دران دران دران دران دران

Significance at .05 level = 2.04, at .01 level = 2.77 for 2, 27.

The 't' value for the difference between means of L.S. of

High and Moderate groups is 3.01 which is significant.

The 't' value for the difference between High and Low groups in their L.S. is 3.95. This value of 't' is significant.

The 't' value for difference in means of L.S. for Moderate and Low levels is 1.08 which is not significant.

#### Conclusions and Discussions

The conclusion that emerges from these statistical analysis is that the scores of L.S. interrelated with the scores of S.R. Children with high scores in S.R. significantly differ in their L.S. scores from those with Moderate and low scores of S.R. The same pattern can be seen in the components of S.R. too. But between the Moderate and Low scorers of S.R. there is no significant difference in the L.S. scores. The highest difference the L.S. scores is in the different levels of Comprehension of English language and Cognitive scores where even the High and Moderate difter significantly at .01 level.

The results may be because if the S.R. is high the child does not have any difficulty in developing language skills and thus score high and vice/versa. The general conductive environment available strengthens his Readiness for school tasks and thus prepare him to fare well. It may be then concluded that G.R. significantly influences the L.S. scores of P.S.C.

HEITING OF HYPOTHESES OF DIFFERENCE IN N.W. ON THE BASIS OF LEVELS OF S.R.

#### lesting Hypothesis B.J.a

Hypothesis B.3.a in the null form states that there is no significant difference in the N.W. of Preschool thildren with different levels of S.R. The difference among the means of N.W. of children with different levels of S.R. is tested for significance using the ANOVA.

The criterion used for classifying the scores of the N.W. of children was on the basis of different levels of S.R. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random nample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.22

SUMS OF SQUARES & MEAN VARIANCES

		والله والله والله والله والله والله والله فيضا والله و	سے ویک چوپار شہد سے صحد شہم ہونڈ صبید جسے امیم راسے ہے پیری م	
· ance	d∱	Sums of Squares	Mean Squares	F
Retween broups	2	2944.69	1472.34	16.16
Within Conditions	27	2457.46	71.02	10.16
			ت سند بين جين بين در پيد در اين در	

The value of F which is 16.18 is significant (significance for f at .05 level = 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of N.W. Hence the hypothesis is rejected. There is a significant difference in the N.W. of children with different levels of S.R.

As f has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDS OF N.W. OF CHILDREN WITH
DIFFERENT LEVELS OF S.R.

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Braup	М	as	SED	t	Level of Significance
High S.R.	72.95	10.82	4.39	4.36	Sig. at .01
Moderate S.R.		8.69			ICAET
	72.95	10.82	4.52	4.98	Sig. at .01
Low S.R.	50.45	9.32			*4***
Moderate S.R.	53.83	8.69	4.03	0.84	Not Sig.
low S.R.	50.45	9.32	يرجم ويون المناز المناز المناز مناز مناز المناز المناز المناز	ه اين خدخ اياب مين نسي ندي ويت ويت	ينها وجود وجود المناف

Significance at .05 level = 2.04, at .01 level = 2.17 for df 2.27.

The 't value for the difference between means of N.W. of High and Moderate groups is 4.36 which is significant.

The 't value for the difference between High and Low groups in their N.W. is 4.98. This value of this significant.

tow levels is .84 which is not significant.

Testing Hypothesis B.J.b

The muli hypothesis B.3.b states that there is no significant difference in the N.W. of Preschool children with different levels of M.S. The technique used to test the hypothesis is the one-way classification of analysis of variance (ANOVA)

The scores of the M.S. obtained by children at different levels were used as criterion to classify the N.W. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken, from each group for the purpose of computing ANOVA.

TABLE 5.24

SUMS OF SQUARES & MEAN VARIANCES

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Source	df	Sums of Square	Mean Square	F
Retween Groups	2	1549.07	774.53	
Within Conditi <b>o</b> ns	27	3558.30	131.79	5.88
,,		والم المنظ منها المنظ المنظ المنظ المنظ المنظ المنظم المنظ		الله ويم بيث ونڌ ساءِ سِن

The F value for the difference among means of N.W. of High, Moderate and Low Groups is 5.88 which is significant (significance of F at .05 level = 3.35 and at .01 level = 5.49 for df 2, 27). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low groups in their N.W.

As the F ratio refutes the null hypothesis, the test is applied to find out which of the differences is equilibricant.

MEANS & SDS OF N.W. OF CHILDREN WITH
DIFFERENT LEVELS OF M.S.

Group	M	SD	SED	t	Level of Significance
High M.S.	68.9	11.41	5.05	2.18	Sig. at .05
Moderate M.S.					14461
High M.S.	68.9		5.44	3.20	Sig. at .01 level
Low M.S.	51.5	12.87			rever
Moderate M.S.		11.17	5.39	1.19	Nat Sig.
Low M.S.	5.15	12.87		p ng (ng kn kn ku ku	

Significance at .05 level = 2.04, at .01 level = . . tor dt 2, 27.

The liter value for the difference between means of N.W. of man and Moderate groups is 2.18 which is significant at .05 recol.

their N.W.15 3.20. This value of 't' is significant at note levels.

The 't' value for difference is means of N.W. for Moderate and Low levels is 1.19 which is not significant.

January Hypothesis 8.3.c

Hypothesis B.3.c in the null form states that there is no significant difference in the N.W. of Preschool inildren with different levels of C.S. The difference among the means of N.W. of children with different levels of C.5. 14, tested for significance using the ANOVA.

The criterion used for classifying the scores of the N.W. of children was on the basis of different levels of t.S. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random cample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.26
SUMS DE SQUARES & MEAN VARIANCES

Sou <b>rce</b>	df	Sums of Square	Mean Square	F
Between Groups	2	2409.80	1204.90	7.49
Within Conditions	27	4343.40	160.87	/ • <del>• •</del> •
- 70 10 10 10 10 10 10 10 10 10 10 10 10		والمرافقة فيها جابر المرافقة المرافقة والمرافقة والمرافقة المرافقة المرافقة المرافقة المرافقة المرافقة المرافقة	تته تلفظ فالله ملي بين بينان وليان ديان ميين لنسر بروار لينزر ريندر مين چ	

(significance for F at 0.05 law in the significant to the significance for F at 0.05 law in the significance

support the null hypothesis of no significant difference among means of N.W. Hence the hypothesis is rejected. There is a significant difference in the N.W. of children with different levels of C.S.

As F has emerged eignificant it is necessary to reat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.27

MEANS & SDS OF N.W. OF CHILDREN WITH

DIFFERENT LEVELS OF C.S.

Group	M	az	SED	t	Level of Significance
High C.S.	72.9	11.53	5.51	2.87	Sig. at .Q1
Moderate C.S.	57.1	13.05			16081
	72.9	11.53	5.75	3.67	Sig. at .01
100 0.5.	51.8	14.08			
Moderate C.S.		13.05	6.07	0.87	Not Sig.
low C.S.	51.8	14.08			مينان اللها ألباني بالنور يبين هذه متراه وبرية سبي المناز ومام يوراه المناز

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of N.W. of High and Moderate groups is 2.87 which is significant.

The 't value for the difference between High and Low groups in their N.W. is 3.6/. This value of this significant.

The 't value for difference in means of N.W. for Moderate and Low levels is .87 which is not significant.

## Testing Hypothesis B.3.d

The null hypothesis B.3.d states that there is no significant difference in the N.W. of Preschool children with different levels of P.5. The technique used to lest the hypothesis is the one-way classification of analysis of variable (ANGVA)

the scores of P.S. obtained by children at different levels were used as criterion to classify the N.W. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.28
SUMS OF SQUARES & MEAN VARIANCES

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Source	df	Sums of Square	Mean Square	F
Between	2	2006.47	1003.23	; ;
Groups 	27	4548.90	168.48	5.95
Conditions	5		医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白 医乳蛋白	

The F value for the difference among means of N.W. of High, Moderate and Low groups is 5.95 which is significant (significance of F at .05 level = 3.35 and at .01 level = 5.49 for df 2,27). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate & Low groups in their N.W.

As the F ratio refutes the null hypothesis, the test is applied to find out which of the differences is significant.

MEANS & SDS OF N.W. OF CHILDREN WITH
DIFFERENT LEVELS OF P.S.

Sr /up	M	SD	SED	t	Level of Significance
Hagh F.S.	69.6	12.02	5.73	2.65	Sig. at .05
Moderate P.S.	54.4	13.55			
High P.S.	69.6	12.02	5.85	3.23	Sig. at .01
LOW P.S.	50.7	14.05			
Moderate P.S.		13.55	6,17	0.60 Not	Not Sig.
	50.7	14.05			

Significance at .05 level, at .01 level for df 2, 27.

The 't value for the difference between means of N.W. of Migh and Moderate groups is 2.65 which is significant at .05

invel.

The 't value for the difference between High and Low groups in their N.W. is 3.23. This value of 't' is significant.

The 't' value for difference in means of N.W. for Moderate and Low levels is 0.60 which is not significant.

#### Testing Hypothesis B.J.e

Hypothesis B.3.e in the null form states that there is no significant difference in the N.W. of Preschool children with different levels of C.E.L. The difference among the means of N.W. of children with different levels of C.E.L. is tested for significance using the ANDVA.

The criterion used for classifying the scores of the N.W. of children was on the basis of different levels of C.E.L. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.30

SUMS OF SQUARES & MEAN VARIANCES

Saurce	df	Sums of Square	Mean Square	F
Between Groups	2	6034.87	3017.43	
Within Conditions	27	8352.10	309.34	9.75
~~~~~~~~				

The value of F which is 9.75 is significant (significance for F at .05 level = 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of N.W. Hence the hypothesis is rejected. There is a significant difference in the N.W. of children with different levels of C.E.I.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the litical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDS OF N.W. OF CHILDREN WITH

DIFFERENT LEVELS OF C.E.L.

бгоцр	M	SD	SED	t	Level of Significance
High C.E.L.	80.4	15.21	7.50	3.56	Sig. at .01
Moderate C.E.L.	53.7				-
High C.E.L.	90.4	18.19	7.73	4.22	Sig. at .01
low C.E.L.	47.8				
Moderate C.E.L.	53.7	19.12	9.35	0.71	Not Sig.
Low C.E.L.	47.8	مند والتال ويون دونت والتال الله على الله والتال الله والتال الله الله الله	، الله و الله الله الله الله الله الله ال		ماند ومن سنة الناد نابان ناب بنيا شند مند وي سن كان ال

Significance at .05 level, at .01 level for df 2, 27.

The 't' value for the difference between means of N.W. of High and Moderate groups is 3.56 which is significant.

The 't' value for the difference between High and Low groups in their N.W. is 4.22. This value of 't' is significant.

The 't' value for difference in means of N.W. for Moderate and Low levels is .71 which is not significant at any level.

Conclusions and Discussions

The interesting facts that are revealed from the proceeding analysis is that S.R. and N.W. are interrelated. Between the Moderate and low levels of S.R. and its components the difference does not seem to be significant.

This is because the favourable S.R. developed, below the child to score favourably in N.W. and if the S.R. is not developed the child finds it difficult to cope up with the tasks of N.W.

LEVELS OF S.R.

Testing Hypothesis B.4.a

Hypothesis B.4.a in the null form states that

Significance at .05 level, at .01 level for df 2, 27.

The 't' value for the difference between means of N.W. of High and Moderate groups is 3.56 which is significant.

The 't' value for the difference between High and Low groups in their N.W. is 4.22. This value of 't' is significant.

The 't' value for difference in means of N.W. for Moderate and Low levels is .71 which is not significant at any level.

Conclusions and Discussions

The interesting facts that are revealed from the princeeding analysis is that S.R. and N.W. are interrelated. Between the Moderate and low levels of S.R. and its components the difference does not seem to be significant.

This is because the favourable S.R. developed, helps the child to score favourably in N.W. and if the S.R. is not developed the child finds it difficult to cope up with the tasks of N.W.

LEVELS OF S.R.

Testing Hypothesis B.4.a

Hypothesis B.4.a in the null form states that

there is no significant difference in the G.K. of Preschool included with different levels of S.R. The difference among the means of G.K. of children with different levels of S.R. is tested for significance using the ANOVA.

The criterion used for classifying the scores of the G.K. of children was on the basis of different levels of S.R. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.32
SUMS OF SQUARES & MEANS OF VARIANCES

	~~~~		ماه سام بادار جام بادار بسا ادار بادار بادار ماه بادار بادا	
Source	df	Sums of Square	Mean Square	F
*		ي وقد بيدر وفي فهم مين بيم همه مده منه ويه ويه فكن الله الله ماله فكن الله ولا والله والله والله والله		
Between Groups	2	2617.21	1308.61	
Within Conditions	27	2572.56	<b>95.28</b>	13.73

The value of F which is 13.73 is significant (significance for F at 0.05 level * 3.35 and .01 level * 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of G.K. Hence the hypothesis is rejected. There is a significant difference in the G.K. of children with different levels of S.R.

As f has emerged significant it is necessary to prest the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.33

MEANS & SDS OF G.K. CHILDREN WITH

DIFFERENT LEVELS OF S.R.

Յլ տ <b>սք</b>	М	SD	SED	t	Level of Significance
digh S.R.	73.25	7.07	4.25	3.17	Sig. at .01
Moderate S.R.	59.78	11.41			14461
High S.R.	73.25	7.07	5.16	4.41	Sig. at .01
	<b>5</b> 0.5	14.71			16461
Moderate S.R.	59.78	11.41	5.89	1.58	Not Sig.
Low S.R.	50.5	14,71			المنافع

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

the 't' value for the difference between means of G.K. of High and Moderate groups is 3.17 which is significant.

The 't' value for the difference between High and Low groups in their G.K. 15 4.41. This value of 't' is significant.

The 't' value for difference in means of G.K. for Moderate and Low levels is 1.58 which is not significant.

### Testing Hypothesis B.4.b

The null hypothesis 8.4.b states that there is no significant difference in the G.K. of Preschool children with different levels of M.S. The technique used to test the hypothesis is the one way classification of analysis of variance. (ANDVA).

The scores of M.S. obtained by children at different levels were used as criterion to classify the G.K. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.34

SUMS OF SQUARES & MEAN VARIANCES

		ه الجهار الله ميوان يوان الجهار الله والإن الله الله والله والله الله الله الله ال		
Source	df	Sums of Square	Mean Square	F
Between Groups	2	2476.07	1238.03	5.65
Within Conditions	27	5915.30	219.09	
·		والمراجع والمراجع المراجع المر	مين چيد شده ليبية هما هي جيد بيد جيه هنه بيت شد ايد جيه جيم	

The F value for the difference among means of G.K. of High, Moderate and Low groups is 5.65 which is significant (significance of F at .05 = 3.35 and at .01 = 5.49 for df 2,27). Therefore the null hypothesis of no

There is a significant difference among the High, moderate and Low Groups in their G.K.

As the F ratio refutes the null hypothesis, the 't' test is applied to find out which of the differences is significant.

TABLE 5.35

MEANS & SDS OF G.K. OF CHILDREN WITH

DIFFERENT LEVELS OF M.S.

Group	M	SD	SED	t	Level of Significance
High M.S.	67.2	14.86	6.27	2.22	Sig. at .05
Moderate M.S.	53.3	13.15			
High M.S.	67.2	14.86	4.77	4.61	Sig. at .01
LOW M.S.	45.2	15.44			
Moderate M.S.	53.3	13.15	4.89	1.66	Not Sig.
Low M.S.	45.2	15.44			gal halo muo siya "lilo moo viya sita take pike anta niki direk

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of G.K. of High and Moderate groups is 2.22 which is

The 't' value for the difference between High and Low groups in their G.K. is 4.61. This value of 't' is significant.

The 't' value for difference in means of G.K. for Moderate and Low levels is 1.66 which is not significant at any level.

# lesting Hypothesis B.4.c

Hypothesis B.4.c in the null form states that there is no significant difference in the G.K. of Preschool children with different levels of C.S. The difference among the means of G.K. of children with different levels of C.S. is tested for significance using the ANDVA.

The criterion used for classifying the scores of the G.K. of children was on the basis of different levels of G.S. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.36

SUMS OF SQUARES & MEAN VARIANCES

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Spurce	df	Sums of Square	Mean Square	F
Between Groups	2	2585 . 27	1292.63	
Within Conditions	27	4812.60	178.24	7,25
		ر هذه المحمد بلادة البحد المجاهد مساوحه شما شيخ نجيد بعدم بعدد المجاه المدار الأناه بدامة بمجاه بالمحد بعدد		

The value of F which is 7.25 is significant

(significance for F at .05 level = 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of G.K. Hence the hypothesis is rejected. There is a significant difference in the G.K. of children with different levels of C.S.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDS OF G.K. OF CHILDREN WITH
DIFFERENT LEVELS OF C.S.

Group	M	SD	SED	t	Level of Significance
High C.S.	81.8	8.13	4.86	2.57	Sig. at .05
Moderate C.S.	69.3	13.05	at ope just my mit me mit me		) الإله بالحن الذي تأويد كاله فيزاء سرا إلفنا بيدن مدم بعدم المنت نامج هد
High C.S.	81.8	8.13	5.83	3.89	Sig. at .01 level
Low C.S.	59.1	16.56		ر برباد بندان معند مين عبده ميند معند ب	يستا بيان فقط ماي يابان كي نايي التي التي التي التي التي التي التي ا
Moderate C.S.	69.3	13.05	6.67	1.53	Not Sig.
Low C.S.	59.1	16.56		أمار كالم يسم كالم والمن المراجع	ي المارة والمارة المارة والمارة

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of G.K. of High and Moderate groups is 2.57 which is significant at .05 level.

The 't' value for the difference between High and Low groups in their G.k. is 3.89. This value of 't' is significant.

The 't' value for difference in means of G.K. for Moderate and Low levels is 1.53 which is not significant at any level.

# Testing Hypothesis B.4.d.

The null hypothesis B.4.d states that there is no significant difference in the G.K. of Preschool children with different levels of P.S. The technique used to test the hypothesis is the one-way classification of analysis of variance (ANOVA)

The scores of P.S. obtained by children at different levels were used as criterion to classify the G.K. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANDVA.

TABLE 5.38

SUMS OF SQUARES & MEAN VARIANCES

an experience of the state of t	, ₁₉₈₆ gran an a	الله الله الله الله الله الله الله الله	क्षण क्षण क्षणि क्षण	
Source	df	Sums of Square	Mean Square	F
Between Groups	2	1883.40	941.70	
Within Conditions	27	4172.10	154.52	6.09
		÷=====================================		

The F value for the difference among means of G.K. of High, Moderate and Low groups is 6.09 which is significant (significance of F at .05 level = 3.35 and at .01 level = 5.49 for df 2, 27). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low groups in their G.K.

As the F ratio refutes the null hypothesis the 't' test is applied to find out which of the differences is significant.

MEANS & SDS OF G.K. OF CHILDREN WITH

DIFFERENT LEVELS OF P.S.

Group	M	SD	SED	t	Level of Significance
High P.S.	67.4	12.29	5.69	2.48	Sig. at .05
Moderate P.S.	53.3	13.14			
High P.S.	67.4	12.29	5.86	3,17	Sig. at .01
low P.S.	48.8	13.89			7 4 4 4 V
Moderate P.S.	53.3	13.14	6.05	0.74	Not Sig.
LOW P.S.	48.8	13.89			

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of G.K. of High and Moderate groups is 2.48 which is significant at .05 level.

The 't' value for the difference between High and Low groups in their G.K. is 3.17. This value of 't' is significant at .01 level

The 't' value for difference in means of G.K. for Moderate and low levels is 0.74 which is not significant.

### Testing Hypothesis B.4.e.

Hypothesis B.4.m. in the null form states that

there is no significant difference in the G... of Preschool children with different levels of C.E.L.. The difference among the means of G.K. of children with different levels of C.E.L. is tested for significance using the ANOVA.

The Criterion used for classifying the scores of the G.K. of children was on the basis of different levels of C.E.L. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.40

SUMS DF SQUARES & MEAN VARIANCES

Saurce	df	Sums of Square	Mean Square	F
Between Groups	2	3837.80	1918.90	8.61
Within Conditions	27	5878.90	217.74	

The value of F which is 8.81 is mignificant (significance for F at .05 level = 3.35 and .01 level = 5.49 for df 2, 27). the obtained evidence does not support the null hypothesis of no significant difference among means of G.K. Hence the hypothesis is rejected. There is a significant difference in the G.K. of children with different

levels of C.E.I ..

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDS OF G.K. OF CHILDREN WITH
DIFFERENT LEVELS OF C.E.L.

Group	М	SD	SED	t	Level of Significance
High C.E.L.	76.6	4.59	4,84	2.77	Sig. at .01
No 'mrate C.E.L.	63.2	14.60			
High C.E.L.	76.6	4.59	6.62	4.18	Sig. at .01
low C.E.L.	48.9	20.44			
Moderate C.E.L.	63.2	14.60	7.94	1.80	Not Sig.
LOW C.E.L.	48.9	20.44			رک کا سے جار دار وہ سے سے رسے سے

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of G.K. of High and Moderate groups is 2.77 which is significant.

The 't' value for the difference between High and Low groups

The 't' value for difference in means of G.K. for Moderate and Low levels is 1.80 which is not significant.

in their G.K. is 4.18. This value of 't' is significant.

# C Group of Hypotheses

## Hypothesis C1-C5

This group encompasses these null hypotheses which deal with the differential distribution of S.R. and A.A. scores among the boys and piris.

The significance of the difference between the means of S.R. and A.A. scores of boys and girls is determined by applying the 't' test or the critical ratio technique.

The level of significance is obtained by comparison with the respective critical values.

## TESTING OF HYPOTHESIS OF GENDER DIFFERENCES IN S.R. AND A.A.

# <u> Testino</u> <u>Hypothesis</u> <u>C.1.a</u>

Hypothesis C.1.a in the null form states that there is no significant difference in the S.R. of Boys and Girls. The critical ratio technique is applied to test the significance of difference in the means of S.R. of boys and qirls.

TABLE 5.42

MEANS AND SDS OF S.R. SCORES OF BOYS AND GIRLS

and the second with the second with the second and the second with the second and the second with the second w						
Group	Number	Means	5D <b>s</b>	SED	t	Sig
JI WS	199	47.11	22.11	2.60	0.33	N.S.
õirls	109	46.23	21.71	a da gay on had the sys am year	. مود و و در مهم وجود المده محمو وي	

The value of 't' for the difference of Means of 5.R. of the boys and girls is found to be 0.33. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.33 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the S.R. of boys and purls.

# Testing of Hypothesis C.1.b

there is no significant difference in the M.S. of boys and girls. The critical ratio technique is applied to test the significance of difference of means of boys and girls.

TABLE 5.43

MEANS AND SDS OF M.S. OF BOYS AND GIRLS

Group	Number	Means	SDs	SED	t	Sig		
Boys	199	13.58	6.71					
				0.77	0.40	N.S.		
Girls	109	13.27	6.49					

The value of 't' for the difference of Means of M.S. of the boys and girls is found to be 0.40. the critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the M.S. of boys and ourls.

#### Testing hypothesis C.1.c

Hypothesis C.1.c in the null form states that there is no significant difference in the C.S. of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of C.S. of boys and girls.

TABLE 5.44

MEANS AND SDS OF C.S. OF BOYS AND GIRLS

Group	Number	Means	SD	SED	t	Sig	
		and the case and the test and the test and the test	وي المن ما المن ومن وي من من وي المن وي المن وي			- 12 AP NO DE PE	
Boys	199	14.96	5.41				
				0.61	0.89	N.S.	
ប់រក្សេ	109	14.42	5.20				
ا الله الله الله الله الله الله الله ال							

The value of 't' for the difference of Means of C.S. of the boys and girls is found to be 0.89. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.89 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the C.S. of boys and oirls.

#### Testing of Hypothesis C.1.d

'Hypothesis C.1.d in the null form sates that there is no significant difference in the P.S. of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of P.S. of boys and girls.

MEANS AND SDS OF P.S. OF BOYS AND GIRLS

		man are now that this post and los - m 180 mile	- 100 24 242 244 255 255 255 255 255	الله الله الله ماله الما الاما الله الله		
Group	Number	Means	SDs	SED	t	Sig
Boys	199	12.80	6.31		i dadi wake pupi dana dana dana dana dana d	ing white mage and person beaut
				0.77	0.26	N.B.
Girls	109	13.00	6.54			
~_ ~		~~~~~~~~				

The value of 't' for the difference of Means of P.S. of the boys and girls is found to be 0.26. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.26 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the P.S. of boys and girls.

#### Testing of Hypothesis C.1.e

Hypothesis C.i.e in the null form states that there is no significant difference in the C.E.L. of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of C.E.L. of boys and girls.

MEANS AND SDS OF C.E.L. OF BOYS AND GIRLS

* * * * * * * * * * * * * * * * * * * *				tion that you says must use both the fire		
Group	Number	Means	SD	SED	<b>t</b>	519
Воль	199	5.69	2.12	0.24	0.70	N,S.
Cirls	109	5.52	2.29			
		***				

The value of 't' for the difference of Means of C.E.L. of the boys and girls is found to be 0.70. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.70 therefore is not significant at both the levels. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

TABLE 5.47

MEANS & SDS OF S.R. AND ITS COMPONENTS

OF BOYS OND GIRLS

Group	Number				5	Level of Significance	
S.R. Boys							
	109					N.S19.	
M.S. Boys						N.Sig.	
Girls		13.27				w.org.	
C.S. Boys						N.S19.	
Girls	109	14.42	5.20	V.61	V.07	W.aig.	
P.S. Boys	199				0.24	N.Sig.	
Girls	109	13.00	6.54		V. 20	Moståe	
C.E.L. Boy	s 199	5.69	2.12	0.74	0.70	N.S.	
Gir	15 109	5.52	2.29	V.27	V./U	)	

#### Conclusions and Discussions

It is clearly evident that gender does not seem to be an important factor affecting the S.R. Even in the components one can note that there is no significant difference among the boys and girls. But considering the means of S.R., the boys seem to score slightly higher than the girls. Even in the components, the boys seem to have an edge over the girls excepting in P.S. where the girls seem to score slightly higher. Could it be that the male children are valued more in Indian society and hence stimulation offered to them is more?

TESTING OF HYPOTHESIS OF GENDER DIFFERENCES IN S.R. AND A.A.

lesting of Hypothesis C.2.a.

Hypothesis C.2.a in the null form states that there is no significant difference in the A.A. of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of A.A. of boys and dirls.

TABLE 5.48

MEANS AND COS OF A.A. OF BOYS AND GIRLS

		n on to you gave plumps take a new man with	~			
Group	Number	Means	SD	SED	t	519
Boys	199	196.29	61.49	7.43	0.11	N.5.
birls	109	197.17	62.87	7.43	0.11	14.0.
	way and a second second					

The value of 't' for the difference of Means of A.A. of the boys and girls is found to be 0.11. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.11 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the A.A. of boys and

## Testing of Hypothesis C.2.b

Hypothesis C.2.b in the null form states that there is no significant difference in the A.A. (at 1st U.T.) of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of A.A. (at 1st U.T.) of boys and girls.

TABLE 5.49

MEANS AND GDS OF A.A. (AT 1ST U.T.)

OF BOYS AND GIRLS

				به اللها وفي حصد سيت ويسيد وحد مثله .		کیں۔ سعد میں ایس دیما سند د
Group	Number	Means	SD	SED	t	Sig
				, when the free free feet and file .	100 100 100 100 100 100	
Boys	199	168.90	59.84			
				7.33	0.67	N.S.
Girls	109	173.78	62.48			
		و غمونه جنوبي كريت بيست بالك خاند مواجد والكرة الدينة مؤملة المرا	ب دین نیب سی سی سی دم منز یہ پی		بر دان سو راب شد سور الله وه	اللاب ونيه وله ولها ملاه الله

The value of 't' for the difference of Means of A.A. (at 1st U.T.) of the boys and girls is found to be 0.67. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.67 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the A.A. (at 1st U.T.) of boys and girls.

## Testing of hypothesis C.2.5

Hypothesis C.2.c in the null form states that there is no significant difference in the A.A. (at 1st S.E.) of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of A.A. (at 1st S.E.) of boys and girls.

TABLE 5.50

MEANS AND SUS OF A.A. AT 151 A.E. OF

BOYS AND GIRLS

Group	Number	Means	SD	SED	t	Sig
Boys	199	182.60	60.77	7.28	0.71	N.S.
Gir <b>ls</b>	109	187.78	61.18			

The value of 't' for the difference of Means of A.A. (at 1st S.E.) of the boys and girls is found to be .71. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the A.A. (1st S.E.) of boys and girls.

## Testing of Hypothesis C.2.d

Hypothesis C.2.d in the null form states that there is no significant difference in the A.A. (at 2nd U.T.) of boys and Girls. The critical ratio technique is applied to test the significance of difference of means of A.A. (at 2nd U.T.) of boys and girls.

TABLE 5.51

MEANS AND SDS OF A.A. (AT 2ND U.T.) OF

BOYS AND GIRLS

		1 1010 1000 1000 1000 1000 1000 1000 1		- 1966 ("-4		
Group	Number	Means	SD	SED	t	519
						, 194 de 12 114 de 12
Boys	199	207.22	61.01			
				7.29	0.48	N.S.
Girls	109	210.70	61.19			
			. The part and and the part that the	ا فدين كالهرد عالمن هندي بيمال لجارات كالمال جديد أ		مؤمر لمدي معام ويود جوال جانات

The value of 't' for the difference of Means of A.A. (at 2nd U.T.) of the boys and girls is found to be 0.48. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.48 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the A.A. (at 2nd U.T.) of boys and girls.

## Testing of Hypothesis C.2.e

Hypothesis C.2.e in the null form states that there is no significant difference in the A.A. (at 2nd S.E.) of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of A.A. (at 2nd S.E.) of boys and girls.

MEANS AND SDS OF A.A. (ZND S.E.) OF
BOYS AND GIRLS

사. # 1985 NEW THE NEW THE PART							
Group	Number	Means	SD	SED	t	5ig	
		. At 1 and 100 live					
Boys	199	221.91	52.14				
				6.07	0.30	N.S.	
Girls	109	223.78	50.38				
	the term of the second of the second	n and seem of a state of the contract of the state of the	سه دس ويد بيوا کند سند کيد سند ويم يد	الك الدو خدد خلك بـبد ميد بندر بيدر		وس نمبر ستو بنی وب. بیر	

A.A. (2nd S.E.) of the boys and girls is found to be 0.30. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.30 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the A.A. (2nd S.E.) of boys and girls.

TABLE 5.53

MEANS AND SUB OF A.A. AT DIFFERENT TESTS OF

BOYS AND GIBLS

		Number				Ę	Significance
A.A.		199				0.11	
	Girls	103	197.17				0 14 B 1 ₀ 47 B Tan tiful later also — po 1 M party ware shape span y
At 1st	Boys	199	168.90				N.S.
U.1.	Girls		173.78				1 <b>V a t</b> to 1 <b>V</b> a t
At 1st	Boys	199				0.71	
S.E.	Girls	109	187.78	61.18	,		
	Boys	199	207.22				3 N.S.
Ų.T.	Girls	109	210,70	61,19			, N.S.
At 2nd		199	221.91	52.14			D N.S.
۲.۲.	Girls	100	223.78	50.38	6.07	0.30 N.S.	

#### Conclusions and Dissussions

the conclusion that emerges from the foregoing analysis is that sex does not seem to affect the A.A. of P.S.C. No significant difference is observed in the A.A. on the whole between boys and girls. The same observation can be noted in each of the tests from 1st U.T. to 2nd S.E. But when the means are taken into consideration, the girls seem to edge over the boys on both counts — on the whole scores and at every test. Could this be because the girls tend to be more hardworking than boys and Indian culture infuses being more.

### TESTING DE HYPOTHESIS DE GENDER DIFFERENCES IN L.S.

### Testino Hypothesis C.3.a

Hypothesis C.3.a in the null form states that there is no significant difference in the L.S. of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of L.S. of boys and girls.

MEANS AND SPS OF L.S. OF BOYS AND GIRLS

Group	Number	Means	SD	SED	t	S19.
Poys	199	64.70	21.36			
				2.62	1.18	N.S.
Girls	109	67,79	22.40			
** ***************	was and the second of the seco	Mira en er skal ens it sener en Militage			بدا شکا بنید کنا باید است مید کار	

The value of 't' for the difference of Means of L.S. of the boys and girls is found to be 1.18. The critical values of 't are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 1.18 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the L.S. of boys and girls.

### Testing Hypothesis C.3.b.

Hypothesis C.3.b in the null form states that there is no significant difference in the L.S. (1st U.T.) of Boys and girls. The critical ratio technique is applied to test the significance of difference of means of L.S. (1st U.T.) boys and girls.

TABLE 5.55

MEANS AND SDS OF L.S. (AT 1ST U.T.) OF

BOYS AND GIRLS

Group	Number	Means	SD	SED	t	Sig,
					~ ~ × · · ·	
Boys	199	56.00	22.64			
				2.71	0.36	N.S.
Girls	109	56.97	22.83			
		water water and particular property and particular				

The value of 't' for the difference of Means of L.S. (1st U.T.) of the boys and girls is found to be 0.36. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.36 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the L.S. (1st U.T.) of boys and girls.

11 4

## Testing Hypothesis C.3.c

Hypothesis C.3.c in the null form states that there is no significant difference in the L.S. (1st S.E.) of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of L.S. (1st S.E.) of boys and girls.

MEANS AND SDS OF L.S. (1ST S.E.) OF
BOYS AND GIRLS

appears was really wash for first in the sea	Wildle And the hour way to be a dark on other work	ne out and their birt type over their as made		و خلمه اللغة فليكم إمينه (متر بنيه يبيد سنة، ه	_ 52 65 65 65 65 65 65	
Group	Number	Means	SD	SED	***************************************	Sig
Boys	199	60.83	22.20	2.06	0.84	N.S.
Girls	109	62.57	21.56			

The value of 't' for the difference of Means of L.S. (1st S.E.) of the boys and girls is found to be 0.84. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.84 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the L.S.(1st S.E.) of boys and girls.

## Testing Hypothesis C.3.d

Hypothesis C.3.d in the null form states that there is no significant difference in the L.S. (2nd U.T.) of boys and girls. The critical ratio technique is applied to test the significance of difference of means of L.S. (2nd U.I.) of boys and girls

MEANS AND SDS OF L.S. (2ND U.T.) OF
BOYS AND GIRLS

P					ب چری میں میک اندیا کانا نائیں انتاب س	
Group	Number	Means	SD	SED	t	Sig.
Boys	199	70.37	20.27	~ A	0.004	
Girls	109	70.36	20.07	2.4	0.004	N.S.
			~~~~~			~

The value of 't' for the difference of Means of L.S. (2nd U.T.) of the boys and girls is found to be 0.004. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.004 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the L.S. (2nd U.T.) of boys and girls.

Testing of Hypothesis 6.5.c.

Hypothesis C.3.e in the null form states that there is no significant difference in the L.S. (2nd S.E.) of boys and girls. The critical ratio technique is applied to test the significance of difference of means of L.S. (2nd S.E.) of boys and girls.

TABLE 5.58

						•
	الله الله الله الله الله الله الله الله	المستوالية		محب فحمل لجوم جائح حيث خطي بيدي	نور جن کا دور الله بازد معر	
Group	Number	Means	SD	SED	t	Sig.
و ماللہ علیہ علیہ کانٹ کی میں میں میں میں اور	TO THE STATE OF THE PARTY OF TH	to . W. wide the gard with with this state have been	han disa silah silah puga pinta yang milit agai masi		پيد جماد مداد اداد خاط جانوا	Pro 0 + 0-11 7-11 AM
Boys	199	74.60	16.99			
				1.97	0.56	N.S.
Girls	109	75.69	16.25			
وي هم بند ښه د بند هم اهم					-	

MEANS AND SDE OF L.S. (2ND S.E.) OF BOYS AND GIRLS.

The value of 't' for the difference of Means of L.S. (2nd S.E.) of the boys and girls is found to be 0.56. the critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.56 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the L.S. (2nd S.E.) of boys and girls.

TABLE 5.59

MEAN: OND SDs OF L.S. AT DIFFERENT LEVELS OF
BOYS AND GIRLS

•	-		_				
Ć	Group	Number	Means	SD			l of ificance
1.5.		199	64.70			1.18	AI C
(Girls	109	67.79	22.40	2.02	1.10	и.э.
	Boys	197	56.00	22.64	7 71	0.36	N 6
U.T.	Girls	109	56.97	22.83	2.71	·	и.э.
	Boys	199	60.83	22.20	2 04	0 04	N.S.
S.E.	Girls	109	62.57	21.56	2.00	0.84	
	Boys	199	70.37	20.27	2 40	0.004	
U.T.	Girls	109	70.36	20.07			14.5.
At 2nd S.E.	Boys	199	74.60	16.99		0.56	
Ð.C.	Girls	109	75.69	16.25	1.7/		

Conclusions and Discussions

On the basis of the analysis it my be concluded that sex of the child does not seem to affect the L.S. of P.S.C. Among the boys and girls, significant difference has not emerged in the L.S. However, considering the means one can see that the girls seem to score over the boys. This is not very surprising since 'Child Development Experts' have claimed that language development is slightly faster and earlier in girls compared to boys.

TESTING OF HYPOTHESIS OF GENDER DIFFERENCES IN N.W.

Testing of Hypothesis C.4.a.

Hypothesis C.4.a in the null form states that there is no significant difference in the N.W. of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of N.W. of boys and girls.

MEANS AND SDS OF N.W. OF BOYS AND GIRLS

TABLE 5.60

	مام درمها خون شبط شبط القائل المامة ومده القوا المامة ومده	ومن ومن المنا ا	يس ملت واي وياد کرد کند ساي سبب پاتار	المراجعة والمراجعة و	ه جب بي ولگ چيم ست بي احد	
Group	Number	Means	SD	SED	t	Sig
Boys	199	68.21	23.26	n gayat magain atalian dadinin yagara sandah dapah banda		
				2.72	0.72	N.S.
Girls	109	66.23	22.73			
** ** ** ** ** ** ** **						~

The value of 't' for the difference of Means of N.W. of the boys and girls is found to be 0.72. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.72 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the N.W. of boys and girls.

lesting of Hypothesis C.4.b

Hypothesis C.4.b in the null form states that there is no significant difference in the N.W. (1st U.T.) of boys and girls. The critical ratio technique is applied to test the significance of difference of means of N.W. (1st U.t.) boys and girls.

1ABLE 5.61

MEANS AND SDS. OF N.W. (AT 1ST U.T.) OF

BOYS AND GIRLS

		the same and the s				
Group	Number.	Means	ຣນ	SED	t	519
and processed all the processing games below that an		. W DOLEN AL WELL HAT STOPE AT PART IN				
Boys	199	57.72	23.23			
				2.87	0.70	N.S.
Girls	109	59.73	24.55			
early have the from their mine when when more district		من بني بين درب درب الله الدر دند بن بني بين				

N.W. (1st U.t.) of the boys and girls is found to be 0.70. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.70 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the N.W. (1st U.T.) of boys and girls.

Testing of hypothesis C.4.c

Hypothesis C.4.c in the null form states that there is no significant difference in the N.W. (1st S.E.) of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of N.W. (1st S.E.) of boys and girls.

MEANS AND SDS OF NEW (1ST S.E.) OF
BOYS AND GIRLS

Group	Number	Means	SD	SED	ŧ	519
Bays	199	65.09	24.26			
				2.90	0.49	N.S.
Girls	109	63.67	24.42			
		-				· /

The value of 't' for the difference of Means of N.W. (1st S.E.) of the boys and girls is found to be 0.49. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.49 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the N.W. (1st S.E.) of boys and girls.

Testing of hypothesis C.4.d

Hypothesis C.4.d in the null form states that there is no significant difference in the N.W. (2nd U.T.) of boys and girls. The critical ratio technique is applied to telt the significance of difference of means of N.W. (2nd U.I.) of boys and girls.

TABLE 5,63

MEDNO AND SD5 OF N.W. (ZND U.T.) OF

BOYS AND GIRLS

		****	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			
Group	Number	Means	SD	SED	t	Sig
				e were the second secon		
Boys	199	71.37	21.63			
				2.55	0.10	N.S.
Girls	109	71.09	21.26			
					يري ورن سنم ميم بيس زده مي ديد .	

The value of 't' for the difference of Means of N.W. (2nd U.I.) of the boys and girls is found to be 0.10. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.10 therefore is not significant at both level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the N.W. (2nd U.T.) of boys and girls.

Testing of Hypothemis C.4.e

Hypothesis C.4.e. in the null form states that there is no significant difference in the N.W. (2nd S.E.) of boys and girls. The critical ratio technique is applied to test the significance of difference of means of N.W. (2nd S.E.) of boys and girls.

TABLE 5.64

MEONS AND SDs OF N.W. (2ND S.E.) OF

BOYS AND GIRLS

Group	Number	Means	SD	SED	t	Sig
				e lety na was a glass pro-sup-r	· — -= -= -= -= -= 12	
Boys	199	75.24	18.56			
				2.22	0.20	N.S.
Girls	109	75 . 69	18.77			

The value of 't' for the difference of Means of N.W. (2nd S.E.) of the boys and girls is found to be 0.20. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.20 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the N.W. (2nd S.E.) of boys and girls.

TABLE 5.65

MEANS & DDS OF N.W. AT DIFFERENT TESTS OF

		मार्थक द्वील के प्रस्ता न		 	and with area horse or the same that was proper from the parties.
		Means			Level of Significance
		60.21		0.72	
Girls	109	56.23	22.73		ur (vo volka blas la e monto en apple dega llevir deĝar
		57.72	/3.23		
Girls	107	59.73	24.55	0.70	N.S.
		65.09			
Girl		63.67	24.42		N.5.
		71.37			
		71.09		0.10	N.5.
		75.24			and fried was bein about mark maps dated upon dated build
Girl	s 109	75.69	18.77		N , S .

Conclusions and Discussions

From the analysis it may be surmised that gender does not seem to influence the N.W.S. Significant difference has not emerged in the Means and SDs of both boys and girls. The Means when observed, the boys have scored more than girls on the whole though by the end of the year the means are almost the same.

TESTING OF HYPOTHESIS OF GENDER DIFFERENCES IN G.K.

Testing of Hypothesis C.S.a

Hypothesis C.S.a. in the null form states that there is no significant difference in the G.K. of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of G.K. of boys and girls.

TABLE 5.66

MEANS AND SDS OF G.K. OF BOYS AND GIRLS

			B			
Group	Number	Means	SD	SED	t	Sig.
Boy's	199	63.55	21.82			
				2.56	0.13	N.S.
Girls	109	63,20	21.31			
	THE PART PART AND AND IT HAVE BEEN	To the state on a major flow while he to shall have seen				m,

The value of 't' for the difference of Means of G.k. of the boys and girls is found to be 0.13. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.13 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the G.K. of boys and

lesting of Hypothesis C.5.b

there is no significant difference in the G.K. (1st U.T.) of Boys and Girls. The critical ratio technique is applied to test the significance of difference of means of G.K. (1st U.T.) boys and girls.

MEANS AND SDS OF G.K. (1ST U.T.) OF

	not, server per proportional all (18 mars). At the	comparation of the second of t				
Group	Number	Means	SD	SED	t	Sig
Boys	199	54.95	22.85	2.64	0.66	N.S.
Girls	109	56.69	21.84	مقم البدي يضع ليميز يسمر يسمر يسمر يسمر		فإنتاز كأبك أبارية استدر الممم الكوا السد

The value of 't' for the difference of Means of G.k. of the boys and girls is found to be 0.66. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.66, therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the G.K. (1st U.T.) of boys and girls.

Tenting of Hypothesis C.S.c.

Hypothesis C.S.c in the null form states that there is no significant difference in the G.K. (1st S.E.) of boys and girls. The critical ratio technique is applied to test the significance of difference of means of G.K. (1st S.E.) of boys and girls.

TABLE 5.68

MEANS AND SUS OF G.K. (1ST S.E.) OF

BOYS AND GIRLS

Group	Number,	Means	SD	SED	t	Sig.
Boys	199	58.41	21.11	2.53	0.007	N.S.
Girls	109	58.43	21.38	ny sphoj dup dida. Naa maa sida dida		en' was mai Maj _{may} nayi dagi mas

The value of 't' for the difference of Means of G.k. (1st S.E.) of the boys and girls is found to be 0.007. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.007 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the G.K. (1st S.E.) of boys and girls.

Testing of Hypothesis C.5.d

Hypothesis C.5.d. in the null form states that there is no significant difference in the G.K. (2nd U.T.) of boys and girls. The critical ratio technique is applied to test the significance of difference of means of G.K. (2nd U.T.) of boys and girls.

TABLE 5.69

MEANS AND SDS OF G.K. (2ND U.T.) OF

BOYS AND GIRLS.

		هود زمين هادم والله لبها مجها حميد الله با 10 يداد -	يسو هوي الله والله الله والله الله الله الله ال			744 are one one one of
Group	Number	Means	SD	SED	t	Sig.
Boys	199	66.15	20.37			
				2.47	1.14	N.S.
Girls	109	68.99	21.08			
		ويوه عليه محمد عنصر عليم عرب حرب عليه عليه عربة ا		100 to 100 miles and 100 miles or	بے سے بھر جہ بہا ت <i>ے</i> ہ	~ ~ ~ ~ ~ ~

The value of 't' for the difference of Means of G.K. (2nd U.T.) of the boys and girls is found to be 1.14. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 1.14 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the G.K. (2nd U.T.) of boys and girls.

lesting of hypothesis C.5.e

Hypothesis C.5.e. in the null form states that there is no significant difference in the G.K. (2nd S.E.) of Boys and girls. The critical ratio technique is applied to test the significance of difference of means of G.K. (2nd S.E.) of boys and girls.

TABLE 5.70

MEANS AND SDS OF G.K.(2ND S.E.) OF

BOYS AND GIRLS

		و عدد البحد عليه والله عبد منظ عليه والمراجعة والمراجعة والمراجعة والمراجعة والمراجعة والمراجعة والمراجعة والم	بياد ويه ميت شيخ جدن بشت فيت ميت ميد دي			
Group	Number	Means	SD	SED	t	Sig.
			عيدا عبد اسم بدن ياض مام طبي جي عك مك			
Boys	199	71.32	17.92			
				2.19	0.58	N.S.
Girls	109	72.57	18.64			
	والوامية منها مناهم والمحارض المحارض ا	- 150	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			

The value of 't' for the difference of Means of G.K. (2nd S.E.) of the boys and girls is found to be 0.58. The critical values of 't' are 1.97 and 2.59 at .05 and .01 levels. The obtained value of 't' 0.58 therefore is not significant at any level. This result supports the hypothesis of no difference. Hence the null hypothesis is accepted.

There is no significant difference in the G.K. (2nd S.E.) of boys and girls.

MEANS & SOS OF G.K. AT DIFFERENT TESTS OF

TABLE 5.71

to the second section of the second section of the		had premium and w		1000 cm (n. 400 cm	 t temm steen state (stat god) sig gener men state blate here after
		Means			Cinnedian
G.K. Boys					
Girls	109	63.20	21.31		N.S.
At 1st Boys	179	54.95	22.85		 ساله الحالة
		56.69			N.S.
At 1st Boys					
S.E. Girls		58.43			N.S.
At 2nd Boys					 کینی بھی کینی جائے نہیں کینٹ جوہ کینٹ کیٹ واقع خو
	109	68.99	21.08		N.S.
At 2nd Boys S.E.	199	71.52	17.92		 and now were well spin gold date and total bills filled files
Gırls		72.57			N . S .

Conclusions and Discussions

The conclusion that emerges from the above analysis is that sex of the child does not seem to affect the G.K. Scores. No significant difference has emerged in the G.K.S. of boys and girls. On the whole when observed the means are almost the same though by the end of the year at 2nd S.E. the girls score over the boys.

General Conclusions

It may be surmised from all these findings that there are no gender differences in S.R. and A.A. When each of the components of S.R. and A.A. are taken individually the results seem to confirm the same. However, considering the means of S.R. the boys seem to score slightly more than the girls and in the A.A., the means of girls are edging over those of the boys.

ը <u>Մըսսը օք Нура</u>էիզբ**ը**

Hypothesis D1 - D5

This Group of Hypotheses deal with the differential distribution of S.R amongst the different age groups.

The differences in the Means of S.R. for the four categories namely:

are tested using ANOVA and the significance found at .05 level or at 0.01 level.

HAPOTHESIS OF DIFFERENCE IN S.R. ON THE BASIS OF AGE

Testing of Hypothesis D.1

there is no significant difference in the S.R. of Pre-School children of different age groups. The difference among the means of S.R. of children with different levels of age are tested for significance using the ANDVA.

The criterion used for classifying the scores of the S.R. of children was on the basis of different age groups. As the size of the sample of the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each of the 4 groups for the purpose of computing Anova.

TABLE 5.72

SUMS OF SQUARES & MEANS VARIANCES

		علاء الهامة المراجعة	ي جود دون همه مدم بخو سو همه شود جود جود جود است خود خود خود مود مود	
Source	d f	Sums of Square	Mean Square	F
Hetween Groups	3	420.28	140.09	0.30
Within Conditions	36	16693.70	463.71	
••		يمن اليور ويود بيان مدن اليور اليور ويود اليور ويود اليور		شها ومن عمد محد ومن

the value of F which is 0.30 is not significant (algorificance for F at 0.05 = 2.86 and .01 = 4.38 for df 3, 36). The obtained evidence supports the null hypothesis of no algorificant difference among means of S .R. Hence the hypothesis is accepted. There is no significant difference in the S.R. of children from different age groups.

Testing of hypothesis D.2

Hypothesis D.2 in the null form states that there is no significant difference in the M.S. of pre-School children from different age groups. The difference among the means of children with different levels of M.S. are tested for significance using the ANOVA.

The criterion used for classifying the scores of the M.S. of children was on the basis of different age groups. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

SUMS DE SQUARES & MEAN VARIANCES

and the same date with the con-	-	the same of the plant to the property again and a same of the same plant good many goods.	ه برب عمل قد کار برب سازی برای برای کار دربان سازی برای باد کار دربان سازی برای باد کار دربان سازی برای باد کار	
Source	d f	Sums of Square	Mean Square	F
		the first state for the state of the state o		
Retween Groups	.5	16.29	5.43	
Within Conditions	36	1899.10	52.75	0.10
		the state and the state and this state has been seen in the state and th		

the value of F which is 0.10 is not significant (significance for F at 0.05 = 2.86 and .01 = 4.38 for df 3, 36). The obtained evidence supports the null hypothesis of no significant difference among means of M.S.. Hence the hypothesis is accepted. There is no significant difference in the M.S. of children from different age groups.

Tosting of Hypothesis D.3

The null hypothesis D.3 states that there is no significant difference in the C.S. of Pre-school children from different age groups. The technique used to test the hypothesis is the one way classification of analysis of variance (ANOVA)

The scores of C.S. obtained by children have been classified on the basis of different age groups of

P.S.C. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.74

SUMS OF SQUARES & MEAN VARIANCES

		, was then their tree block film rater Pills days then then had also sales again and again, seen approprint, i,e,,,	ويجيد كالجور ويهم شنش ششد أشده الملاء وأحد فيرث بأناه جيمت يباثك محرب سرات أسبرة	يتي هند مند مند من مند مند من
Source	df	Sums of Square	Mean Square	F
		ه الله الله الله الله الله الله الله ال		
Between Groups	3	47.00	15.67	
J. 54,54				0.42
Within Conditions	36	1356.60	37.68	

The F value for the difference among means of C.S. of different age groups is 0.42 which is significant (significance of F at .05 = 2.86 and at .01 = 4.38 for df 3 & 36). Therefore the null hypothesis of no significant difference among means stands tenable. There is no significant difference among the different age groups in their C.S.

Testing of Hypothesis D.4

Hypothesis D.4. in the null form states that there is no significant difference in the P.S. of Pre-school

children from different age groups. The difference among the means of children with different levels of P.S. are tested for significance using the ANDVA.

The criterion used for classifying the scores of the P.S. of children was on the basis of different age group. As the size of the sample of the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

SUMS OF SQUARES & MEAN VARIANCES

TABLE 5.75

		عدد جمع الله الله الله عدد عدد الله عند الله عند الله الله الله عند الله الله الله الله الله عند الله الله الل 	وسير والدر والدر والله والمن والمن المناه والمن المناه والمن المناه المناه المناه المناه المناه المناه المناه	
Source	df	Sums of Square	Mean Square	F
Between Groups	3	123.20	41.07	1.05
Within ('onditions	36	1408.40	39.12	

The value of F which is 1.05 is not significant (significance for F at .05 = 2.85 and .01 = 4.38 for df 3, 36). The obtained evidence supports the null hypothesis of no significant difference among means of P.S.. Hence the hypothesis is accepted. There is no significant difference in the P.S. of children from different age groups.

Testing of Hypothesis D.5.

The null hypothesis D.5. states that there is no significant difference in the C.E.L. of pre-school children from different age groups. The technique used to test the hypothesis is the one-way classification of analysis of variance (ANDVA)

The scores of C.E.L. obtained by children were classified on the basis of different age groups of P.S.C. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.76

SUMS OF SQUARES & MEAN VARIANCES

Source	df	Sums of Square	Mean Square	F
Between Groups	3	2.68	0.89	
5. Gups			0	.19
Within Conditions	36	169.10	4.70	

The F value for the difference among means of C.E.L. of different age groups is 0.19 which is not significant (significance of F at .05 = 2.86 and at .01 =

4.38 for df 3 & 36). Therefore the null hypothesis of no significant difference among means stands tenable. There is no significant difference among the different age groups in their C.E.L..

Conclusions and Discussions

As regards the S.R. of the child, the findings of the study lead to the conclusion that the age of the child does not influence the S.R. But, considering the means it seems to slightly increase with the advancement of age. This may perhaps then mean that other factors seem to be more important, like the S.E.S., H.B. etc., than the age of the child.

E Group of Hypotheses

Testing of Hypothesis E.1

Hypothesis E.1. in the null form states that there is no significant difference in the O.A. of Preschool children with different levels of S.R. The difference among the means of O.A. of children with different levels of S.R. 15 tested for significance using the ANOVA.

The criterion used for classifying the scores of

the O.A. of children was on the basis of different levels of S.R. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.77

SUMS OF SQUARES & MEAN VARIANCES

w		ية بيشة ميدة مدد مدد ويش ويدر بيات ميدة مدد ويزه ميد الله الله فيد ويد الله الله ويد ويد ويد الله ا		
Source	df	Sums of Square	Mean Square	F
Between Groups	2	1959.20	979.60	11.27
Within Conditions	27	2347.60	86.95	
		ين ويود كريد لبدن بعد دجه مراد منه كله سرم جمد سنة يانان بران جدد سن كند كما باجر جرد	ستر من بادر وال سنة نبية نبية من عند عند الله سال الله عال الله	

The value of F which is 11.27 is significant (significance for F at 0.05 level = 3.35 and .01 level = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of 0.A. Hence the hypothesis is rejected. There is a significant difference in the 0.A. of children with different levels of S.R.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDS OF O.A. OF CHILDREN WITH
DIFFERENT LEVELS OF S.R.

•					
Graup	M	SD	SED	t	Level of Significance
High S.R.	71.4	6.95	3.74	3.27	Sig. at .01
Moderate S.R.		9.56			16.46.1
High S.R.		6.95	4.41	4.45	Sig. at .Oi level
Low S.R.		12,09			16461
Moderate S.R.			4.87	1.52	Not Sig.
Low S.R.	51.8	12.09	والمراجعة	وس کند الدو بازی پوت سرن چدن کند ده	phone tillen mage stelle lengte som seste kyler skom delen stelle tillen glebr

Significance at .05 level 2.04, at .01 level for df 2, 27

The 't' value for the difference between means of Q.A. of High and Moderate groups is 3.27 which is significant.

The 't' value for the difference between High and Low groups in their O.A. is 4.45. This value of 't' is significant.

The 't' values for difference in means of O.A. for Moderate and Low levels is 1.52 which is not significant.

Testing hypothesis E.2

The null hypothesis E.2 states that there is no significant difference in the O.A. of Preschool children with

different levels of M.S. The technique used to test the hypothesis is the one way classification of analysis of Variances (ANOVA)

The scores of M.S. obtained by children at different levels were used as criterion to classify the O.A. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.79

SUMS OF SQUARES & MEAN VARIANCES

ے عب سے کے سے بتی بلت میہ بہت شد ہے ہی						
Source	df	Sums of Square	Mean Square	F		
Between Groups	2	1976.87	988.43	7.27		
Within Conditions	27	3670.50	135.94			

The F value for the difference among means of O.A. of High, Moderate and Low Groups is 7.27 which is significant (significance of F at .05 level = 3.35 and at .01 level = 5.49 for df 2 & 27). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low groups in their O.A.

As the F ratio refutes the null hypothesis, the \cdot t test is applied to find out which of the differences is significant.

MEANS & SDS OF O.A. OF CHILDREN WITH

TABLE 5.80

Group	M	SD	SED	t	Level of Significance
High M.S			5.44	2.72	Sig. at .05
Moderate M.S.	53.2	12.18		· · · · · · · · · · · · · · · · · · ·	1 tt v tt 4
High M.S.	68.0	12.14	5.59	3.38	Sig. at .01
Low M.S.					
Moderate M.S.			5.60	0.73	Not Sig.
Low M.S.	49.1	12.85	الله على على على والله		المالية

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of O.A. Of
High and Moderate groups is 2.72 which is significant at .05
level.

The 't' value for the difference between High and Low groups in their O.A. is 3.38. This value of 't' is significant at .01 level.

The 't' value for difference in means of G.A. for Moderate and Low levels is 0.73 which is not significant.

Testing Hypothesis E.3

The null hypothesis E.3 states that there is no significant difference in the O.A. of Preschool children with different levels of C.S. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA)

the scores of C.S. obtained by children at different levels were used as criterion to classify the O.A. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.81
SUMS OF SQUARES & MEAN VARIANCES

من جول بيت بيت خان والد والد كان الله الله الله الله الله الله الله ال	با جند جم لنظ بحد سه جه شد شمر حم بحد بدر	و همية الله و والله الله والله والله والله والله معمد الله والله والله والله والله والله والله الله	ك الدين وحدد دولة عليه وحدد مسال وميار لوقت وسي تعالي والي الم	
Source	df	Sums of Square	Mean Square	F
Between Groups	2	1694.60	847.30	6.97
Within Conditions	27	3282.10	121.58	

The F value for the difference among means of U.A. of High, Moderate and Low Groups is 6.97 which is significant (significance of F at .05 level = 3.35 and at .01 level = 5.49 for df 2, 27). Therefore the null hypothesis of

no significant difference among means does not stand tenable.

There is a significant difference among the High, Moderate and Low Groups in their O.A.

As the F ratio refutes the null hypothesis, the 't' test is applied to find out which of the differences is significant.

TABLE 5.82

MEANS & SDS OF O.A. OF CHILDREN WITH

DIFFERENT LEVELS OF C.S.

				، برت بنید جید بنک مند مند ساد ساد	مربعة المراجعة والمراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المر
Group	M	SD	SED	t	Level of Significance
High C.S.	71.3	H.74	4.20	3.26	Sig. at .Oi
Moderate C.S.		9,99			
High C.S.		8.74	4.37	4.01	Sig. at .01
Low C.S.	53.8	10.69			
Moderate C.S.	57.8	9,99	4.63	0.82	Not Sig.
Low C.S.	53.8	10.69			

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of 0.A. of H_1gh and Moderate groups is 3.26 which is significant.

The 't' value for the difference between High & Low groups in their O.A. 15 4.01. This value of 't' is significant.

The 't' value for difference in means of D.A. for Moderate and Low levels is 0.82 which is not significant.

Testing Hypothesis E.4

The null hypothesis E.4 states that there is no significant difference in the O.A. of Preschool children with different levels of P.S. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA)

The scores of P.S. obtained by children at different levels were used as criterion to classify the O.A. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.83
SUMS OF SQUARES & MEAN VARIANCES

	حضر الله وجرم بين الله عند المن المن المن المن المن المن المن المن		
df	Sums of Square	Mean Square	F
	part to the season with the sales and made belonger which also been seen their first with the season with the	الد سنة دني البدر ومنا وين مين والا مية الله الله ومنا من مال علم	
7	2796.07	1398.03	
			7.78
27	4853.40	179.76	
	<u> </u>	2 2796.07	2 2796.07 1398.03

The F value for the difference among means of O.A. of High, Moderate and Low Groups is 7.78 which is significant (significance of F at.O5 level = 3.35 and at .O1 level = 5.49 for df 2, 27). Therefore the null hypothesis of

no significant difference among means does not stand tenable.

There is a significant difference among the High, Moderate and Low groups in their O.A.

As the F ratio refutes the null hypothesis, the 't' test is applied to find out which of the difference is significant.

TABLE 5.84

MEANS & SDS OF O.A. OF CHILDREN WITH

DIFFERENT LEVELS OF P.S.

				,	
Group	М	SD	SED	t	Level of Significance
High P.S.	73.7	6.69	5.24	2.50	Sig. at .05
Moderate P.S	. 60.6	15.15			والمراو المنت المارة مناسع المنتع المنتع المنتع المنتعة والمنتعة المنتعة المنتعة والمنتعة والمنتعة والمنتعة وا
High P.S.	73.7	6.69	6.20	3.81	Sig. at .01 level
Low P.S.	50.i	18.43			يناه بيناه وي شاه دارد ليود وي بينا واقد خان، واق بين سيد يست د
Moderate P.S	. 60.6	15.15	7.54	1.39	Not Sig.
Low P.S.	50.1	18.43	, , , , , , , , , , , , , , , , , , ,		عد بنيد سده حدد هند هند هند بنيم عدد هند غنيه نورد ويون عد

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of O.A. of High and Moderate groups is 2.50 which is significant at .05. The 't' value for the difference between High and Low groups in their O.A. is 3.81 This value of 't' is significant.

The 't' value for difference in means of O.A. for Moderate and low levels is 1.39 which is not significant.

Testing Hypothesis F.5

The null hypothesis E.S. states that there is no significant difference in the D.A. of Preschool children with different levels of C.E.L.. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA)

The scores of C.E.L. obtained by children at different levels were used as criterion to classify the O.A. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANDVA.

TABLE 5.85
SUMS OF SQUARES & MEAN VARIANCES

		بک کہ کہ انہا ہی جات اپنے سے غیر سے اپنے سے شہر سے غیر سے اپنے		
Source	df	Sums of Square	Mean Square	F
THE REAL PROPERTY AND REAL PROPERTY AND THE REAL PROPERTY AND THE REAL PROPERTY.		والمنا المناف		
Between Groups	2	1688.47	844.23	enti me
Within Conditions	27	3490.20	129.27	6.53
Within	27	3490.20	129.27	6.53

The F value for the difference among means for O.A. of High, Moderate and Low Groups is 6.53 which is significant (significance of F at .05 level = 3.35 and at .01 level = 5.49 for df 2 & 27). Therefore the null hypothesis of no significant difference among means does not stand

tenable. There is a significant difference among the High, Moderate and Low Groups in their D.A.

As the F ratio refutes the null hypothesis, the 't' test is applied to find out which of the differences is significant.

MEANS & SDS OF O.A. OF CHILDREN WITH
DIFFERENT LEVELS OF C.E.L.

				,	
Group	M	SD	SED	t	Level of Significance
High C.E.L.	72.8	7.33	4.45	1.42	Not Sig.
Moderate C.E.L.	66.5	12.01	7.40	* • 72	WOU DIG .
High C.E.L.	72.8	7.33	5.81	3.12	Sig. at .O1
Low C.E.L.	54.7	16.84			
Moderate C.E.L.	66.5	12.01	6.54	1.80	Not Sig.
Low C.E.L.	54.7	16.84			

Significance at .05 level = 2.04, at .01 level = 2.77 for df 2, 27.

The 't' value for the difference between means of O.A. of High and Moderate groups is 1.42 which is not significant at any level.

The 't' value for the difference between High and Low groups in their O.A. is 3.12. This value of 't' is significant.

The 't' value for difference in means of D.A. for Moderate and Low levels is 1.80 which is not significant.

Conclusions and Discussions

The analysis of O.A. scores reveal some interesting results. Children score high in other activities too if they have scored high in S.R. There seems to be a significant difference in the O.A. scores of children from different levels of S.R.

This is because the stimulation available to the child for development of S.R. also encourages his abilities in other activities (O.A.). The varied opportunities and conductive environment in the form of better Home Background and favourable Parental Involvement in the child's rearing strengthens his abilities not only in the readiness aspects associated with school requirements but also his general Capacities in his drawing, craft, creative work etc., which constitute O.A. (Other Activities).

E broup of Hypotheses

Hypotheses F1 - F5.

The various characteristics of children were rated by the teachers on a proforma. This "Teacher Rating" (T.R.) was on Self Attributes (S.A.) like Personal Data (P.D.), Mental Abilities (M.A.), Social Skills(S.S) and Personality Traits (P.T.). Their "Knowledge of English"

(K.E.) was also rated. These ratings were taken up to find out whether there is any significant relationship between S.R. and each of these aspects as rated by the teacher.

The hypothesis of relationship between S.R. and T.R. on S.A. for P.S.C. are put together to form this group. The relationship between S.R. and various components of S.A. are tested.

obtained from the correlation of coefficient which are presented in the corresponding tables. The critical values of r at .01 level for the corresponding degrees of freedom is used to compare the obtained r and the significance is determined.

TESTING OF HYPOTHESIS OF RELATIONSHIP BETWEEN S.R. & T.R.

<u>lesting Hypothesis F.1</u>

The null hypothesis F.1 states that there is no significant relationship between S.R. and T.R. on S.A. of Preschool children. The technique used in testing this hypothesis is the Product moment coefficient of correlation. The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of S.R. and the 'y' variable represents the class interval scores of T.R. on S.A. of P.S.C.

TABLE 5.87

SIGNIFICANCE OF 'r' FOR S.R. AND T.R. ON S.A.

Sample Size	df	r	Level of Significance
308	306	0.26	.01 level

From the correlation coefficient presented in Table 5.87 the coefficient of correlation between 'S.R., and T.R. on S.A. is read as 0.26. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant positive but low relationship between S.R. and T.R. on S.A. of Preschool children.

Testing of Hypothesis F.2

The hypothesis F.2 states that there is no significant relationship between S.R. and T.R. on M.A. of Preschool children. The null hypothesis was tested using the product moment coefficient of correlation technique. A scattergram was drawn to compute the 'r' where in the class interval scores of S.R. of P.S.C. is represented in the 'x'

variable and the class interval scores of T.R. on M.A. of P.S.C. is represented in the 'y' variable.

TABLE 5.88

SIGNIFICANCE OF 'r' FOR S.R. & T.R. ON M.A.

Sample Size	df	L	Level of Significance
308	306	0.27	At .O1 level

As can be observed from the correlation coefficient presented in Table 5.88 the coefficient of correlation between S.R. and T.R. on M.A. is read as 0.27. The critical values of 'r' for significance at .01 level is .148 for degrees of freedom 306.

There is a significant positive but low relationship between S.R. and T.R. on M.A. of Preschool children.

Testing of Hypothesis F.3

The null hypothesis F.3 states that there is no significant relationship between S.R. and T.R. on P.D. of Preschool children. The technique used in testing this hypothesis is the Product moment coefficient of correlation. The 'r was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of S.R. and the

'y' variable represents the class interval scores of T.R. on P.D. of P.S.C..

TABLE 5.89

SIGNIFICANCE OF 'r' FOR S.R. & T.R. ON P.D.

Sample Size	df	L.	Level of Significance
308	306	0.19	.O1 level

From the correlation coefficient presented in Table 5.89 the coefficient of correlation between 5.R. and T.R. on P.D. is read as 0.19. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant, positive but negligible relationship between S.R. and T.R. on P.D. of Preschool children.

Testing of Hypothesis F.4

The hypothesis F.4 states that there is no significant relationship between S.R. and T.R. on S.S. of Preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique. A

scattergram was drawn to compute the 'r' where in the class interval scores of S.R. of P.S.C. is represented in the 'x' variable and the class interval scores of T.R. on S.S. of P.S.C. is represented in the 'y' variable.

TABLE 5.90
SIGNIFICANCE OF 'r' FOR S.R. & T.R. ON S.S.

Sample Size	df	, L ,	Level of Significance
308	306	0.23	At. O1 level
	سر پين ايند است به اينو بخيا واي پين دهه منه است . است د د		

As can be observed from the correlation roefficient presented in Table 5.90 the coefficient of correlation between S.R. and T.R. on S.S. is read as 0.23. The critical value of 'r' for significance at .01 level is .148 for degrees of freedom 306.

There is a significant positive but low relationship between S.R. and T.R. on S.S. of Preschool children.

Testing of Hypothesis F.5

The null hypothesis F.5 states that there is no significant relationship between S.R. and T.R. on P.T. of Preschool children. The technique used in testing this hypothesis is the Product moment coefficient of correlation.

h. .

The 'r' was computed by drawing a scattergram in which the 'x' variable represents the class interval scores of S.R. and 'y' variable represents the class interval scores of T.R. on P.T. of P.S.C..

TABLE 5.91

SIGNIFICANCE OF 'r' FOR S.R. & T.R. ON P.T.

Sample Size	d f	, L ,	Level of Significance
308	306	0.21	.01 level

From the correlation coefficient presented in Table 5.91 the coefficient of correlation between S.R. and T.R. on P.T. is read as 0.21. This value of 'r' is significant at the .01 level as the critical value for significance of 'r' at .01 level is .148 for degrees of freedom 306. Therefore the null hypothesis of no relationship is rejected as the evidence is not supportive.

There is a significant positive but low relationship between S.R. and T.R. on P.T. of Preschool children.

Testing of Hypothesis F.6

The hypothesis F.6 states that there is no significant relationship between S.R. and T.R. on K.E. of

Preschool children. The null hypothesis was tested using the Product moment coefficient of correlation technique. A scattergram was drawn to compute the 'r' where in the class interval scores of S.R. of P.S.C. is represented in the 'x' variable and the class interval scores of T.R. on K.E. of P.S.C. is represented in the 'y' variable.

SIGNII DIANCE OF 'F' FOR S.R. & T.R. ON K.E.

Sample Size	df	, la ,	Level of Significance
	• •	and the second s	
208	306	0.32	.01 level

coefficient presented in Table 5.92 the coefficient of correlation between S.R. and T.R. on K.E. is read as 0.32. The critical value of 'r for significance at .01 level is .148 for degrees of freedom 306. The obtained 'r' denotes positive but low relationship i.e. the more the scores in S.R., the higher are likely to be the scores in K.E. This result does not support the hypothesis of no relationship. So the null hypothesis is rejected.

There is a significant positive but low relationship between S.R. and K.E. of Preschool children.

Conclusions and Discussions

there is a positive and significant correlation between S.R. and T.R. on S.A. The same has been seen in the components of S.A. too. Children with high S.R. tend to have high scores in S.A. This may be because the high S.R. in itself helps the child to build up attributes which are favourable. The highest correlation is between M.A. and S.R. and least is between P.D. and S.R.. This follows in line with our earlier findings where A.A. and C.S. are highly correlated and the correlation is low with A.A. and M.S.

G Group of Hypotheses

Hypothesis of G.1 - G.5

TESTING OF HYPOTHESIS OF DIFFERENCE IN S.R. ON THE BASIS OF HOME BACKGROUND (H.B.)

The admission form for admission into the school was used for collecting information on H.B. The following aspects were taken from it:

Parents' Education
Parents' Occupation
Economic Status
Number of Siblings
Residential Area

This group of null hypothesis deals with the differential distribution of means of S.R. scores for the various categories of Home Background. The differences in means of S.R. scores are tested by using Analysis of Variance. The significance is determined by comparison with the respective critical values.

Testing Hypothesis G.1.a

Hypothesis G.1.a in the null form states that there is no significant difference in the S.R. of Pre-school children with different levels of Parents Education. The difference among the means of S.R. of children with different levels of E.P. are tested for significance using the ANOVA.

The criterion used for classifying the scores of the S.R. of children was on the basis of different levels of P.E. As the size of the sample of the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

SUMS OF SQUARES & MEAN VARIANCES

	w w ben \$ 10 to 10 H	TO TAIN, 1978 THE PICT STATE FROM THE SAID IN THE SECURITY SAID THE SAID THE SAID STATE SAID STATE SAID.	والمرافقة المرافقة والمرافقة والمراف	er
Source	df	Sums of Square	Mean Square	۴
and the sea field then then been took took from the took	10 mm per er 8 mm H mm 13	रह क्ष्मा क्षमा प्रमुख रुपके पुरेर रुपन्ने (पुरे समझ झार स्थित सामा वर्क अरन व्यवस्थ साम स्थान (स्थान स्थान प	Man min (Add way (MA) My (An And M)), prop grap proc Kijil Fore - A	
Between Groups	<u>,</u> 1	3747.80	1873.90	
				16.45
Within Conditions	27	3076.50	113.94	
		an major du dan dan major dan si pada major biga dan di maja maja maja		

Ine value of F which is 16.45 is significant (significance for F at 0.05 = 3.35 and .01 = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of S.R. Hence the hypothesis is rejected. There is a significant difference in the S.R. of children with different levels of Parents' Education (P.C.).

As F has emerged significant it is necessary to treat the data to further process of testing. So the critical ratio test was applied to find out which of the 3 differences is significant.

MERCHO S SDS OF S.R. OF CHILDREN WITH
DIFFERENT LEVELS OF P.E.

TABLE 5.94

· · · · · · · · · · · · · · · · · · ·	10 T = 44 AR home top grow	- विकास क्षेत्री - पार्ट पोर्ट्स क्षेत्रीय स्थित स्थाप स्थाप क्षाप्त क्षाप्त क्षाप्त क्षाप्त स्थाप	 ~ ~ ~ ~ ~ ~	N 400 COT 100
Group	M 	SD		Level of Significance
High on P.E.				8
Moderate on C.E.				
High on P.E.				8
Low on P.E.				
Moderate on P.E.				N.S.
low on P.E.	.58.6	17.40	 هر مدن طور علي مدن سود ندن	al high high day, and give you had dury day gap, gap,

Significance of 't' at .05 = 2.04, .01 = 2.77 for df $P_{\rm s}$, 27.

The 't value for the difference between means of S.R. of High and Moderate groups is 3.17 which is significant at .01 level.

The 't value for the difference between High and Low groups in their S.R. is 4.39. This value of 't' is also significant.

The 't' value for difference in means of S.R. for Moderate and low levels is 1.56 which is not significant.

Testing of Hapothesis G.L.b

no significant difference in the S.R. of Preschool children with different levels of Mothers Education. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA).

The criterion used for classifying the scores of the S.R. of children was on the basis of different levels of M.E. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANGVA.

TABLE 5.95
SUMS DE SQUARES & MEAN VARIANCES

All the trial and the state with the trial and the			ستار جيك أتنبه شمر يشهد لمنت هائد يفته بيبت جيئة شيية جين ابنت بدئة يتباد بيدة يهيلا سيه يبيرو خذ	
Saurce	ផ្ស	Sums of Square	Mean Square F	•
*****		the part of the pa	هند وجود مرب البيد من الله وجود البيد	· ~
Between Groups	21	5940.87	2970.43	. ~
Within Conditions	77 7	2540.60	31.5 94.10	1/

The F value for the difference among means of S.R. of High, Moderate and Low groups is 31.57 which is significant (significance of F at .05 =3.35 and at .01 =5.49 for df 2 & 27). Therefore the null hypothesis of no significant difference among means does not stand tenable.

There is a significant difference among the High, Moderate and Low Group . in their S.R.

Here the k ratio refutes the null hypothesis the ${\rm it}'$ test is applied to find out which of the differences is significant.

MEANS & SDS OF S.R. OF CHILDREN WITH
DIFFERENT LEVELS OF M.E.

Group	M	SD	SED	t	Level of Bignificance
High M.E.	71.7	7.20	4.66	4.10	8
Moderate M.E.	52.6	12.86			
High M.E.	71.7	7.20	n		کیٹر فیچ میں ہیٹر میٹر میں ہمی ہمی ہمی ہمی ہمی ہمی ہمی ہمی ہمی
	37.3	19.99	6.72	5.12	s
Moderate M.E.		12.86	7.52	2.04	S at .05
Low M.E.	37.3	19.99			

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 4.10 which is significant.

The 't' value for the difference between High and Low groups in their S.R. is 5.12. This value of 't' is significant.

The 't' value for difference in means of S.R. for Moderate and Low levels is 2.04 which is significant at .05 level.

Testing of Happitheries balaca

there is no supported and difference in the S.R. of Preschool children with different levels of Fathers' Education. The difference among the means of S.R. of children with different levels of fill are finited for supportionic using the ANOVA.

the S.R. of children was on the banks of different levels of F.E. As the nize of the numble in large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.97
SUMS OF SQUARES & MEAN VARIANCES

	v /v 4 44 6-	ويت المال	والله والله شدة جين الله على منها والله شان جين ولك منه والله شان الله	
Source	.11	Sums of Square	Mean Square	۴
The second secon		والمنافعة والمرافعة والمرافعة والمرافعة المرافعة المرافعة المرافعة المرافعة المرافعة المرافعة المرافعة المرافعة	والمراجع والمراجع والمراجع المراجع المراجع والمراجع المراجع المراجع والمراجع والمراجع والمراجع والمراجع والمراجع	
Between Groups	2	1743.27	871.63	B.70
Within Conditions	27	2704.60	100.17	B.70

The value of F which is 8.70 is significant (significance for F at .05 = 3.35 and .01 = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of S.R.

Hence the hypothesis is rejected. There is a significant difference in the S.R. of children with different levels of F.L.

As I has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.98

MEANS & SDs OF S.R. OF CHILDREN WITH

DIFFERENT LEVELS OF F.E.

Group	M	SD	SED	t	Level of Significance
High F.E.	59.7	10.53	5.04	2.64	S at .05
Moderate F.E.					
High F.E.			5.25	3.43	S
Low F.E.					
Moderate F.E.			5.55	0.85	N.S.
Low F.E.			sphere strang ways. Who, apper stated finance before below to	الله مي من من الله الله من قام الله الله	

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 2.64 which is significant at .05 level.

The 't' value for the difference between High and Low groups in their S.R. is 3.43. This value of 't' is significant. The 't' value for difference—in means of S.R. for Moderate and Low levels is 0.85 which is not significant.

Testing of Hypothesis G. 2. 4.

Testing of Hypothesis G.2.a. states that there is no significant difference in the S.R. of Preschool children with different levels of Mothers Occupation. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANDVA)

The criterion used for classifying the scores of the S.R. of children was on the basis of different levels of M.O. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.99
SUMS UF SQUARES & MEAN VARIANCES

	* "	والمستقل والأساف والمستقدم والمستروح فين بيدا والمستقل المستوا والمستقل المستوارين والمستقل المستوارين		
Source	df	Sums of Square	Mean Square	F
***************************************		والمراقب المراقب المرا	ين جن آخر کند پند جن جن حال جن جي غيم جن جن ميد بند بند بند	~ <u>~</u>
Between Groups	2	1947.80	973.90	n #8
Within Conditions	27	2743.00	101.59	9.59

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 2.69 which is significant.

The 't' value for the difference between High and Low groups in their S.R. is 4.01. This value of 't' is significant at .01 level.

The 't' value for difference in means of S.R. for Moderate and Low levels is 1.43 which is not significant at any level.

Testing of Hypothesis G.2.b.

Hypothesis 6.2.b in the null form states that there is no significant difference in the S.R. of Preschool children with different levels of Fathers' Occupation. The difference among the means of S.R. of children with different levels of F.O. are tested for significance using the ANDVA.

The criterion used for classifying the scores of the S.R. of children was on the basis of different levels of F.O. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.101
SUMS OF SQUARES & MEAN VARIANCES

and the same was the same of t		· co air - ann i leaf dhòr, ann fòir ann air, dha pan àrm bar shou ann aire bhri thai bhe bhri tha bail bhri t	ومدين النبية ينتجم وجمود ينتهم والكراء ويلكوا أطيان فالأك فيكا أحميد أأكام الك	الجور باسة خماد مجا
Source	df	Summ of Square	Mean Square	F
Between Groups	4 .	128302	32076	
Within Conditions	45	115256	2561	12.52
an ang ang ang ann pang menturun an pang an		and in the second . He design are supported upon these was specific build along upon these week good. Web saidly sing	· · · · · · · · · · · · · · · · · · ·	

The value of F which is 12.52 is significant (significance for F at 0.05 = 3.35 and .01 = 5.49 for df 4, 45). The obtained evidence does not support the null hypothesis of no significant difference among means of S.R. Hence the hypothesis is rejected. There is a significant difference in the S.R. of children with different levels of Fathers Occupation.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.102

MEANS AND SDS OF S.R. OF CHILDREN WITH

DIFFERENT LEVELS OF F.O.

Occupation	Group	M	SD	SED	t	Level of Significance
Professional	1	75.5	11.83	5 17	7 50	
Manager	2	55.6	14.11	5.13		Sig. at .01
Professional	1	75.5	11.83			
Business	3	45.4	6.03			Sig. at .01
Professional	1	75.5	11.63			ميد پيدا چيل ميل ميد ادام پاهم چيو پيوا شده مده ميد .
Labourer	4	41.4	9.06			Sig. at .01
Professional	1	75.5	11.83			
Clerical	5	59.6	7.09			51g. at .01
Manager		55.6	14.11			The many thirt control of the second
Business	3	45.4	6.03			Sig. at .01
Manager	2	55.6	14.11			
Labourer	4	41,4	9.06	4.53	3,31	Sig. at .01
Manager	2	55.6	14.11			
Clerical	5	39.6	7.09	4-17	3.84	51g. at .01
Business	3	45.4	6,03			* (84) mil ion (84) am am
Labourer	4	41.4	9.06	3.44		N.S.
Business	3	45.4	6.03			
Clerical	5	39.6	7.09	2.94	1.70	N.S.
Labourers	4	41.4	9.06	ده کند حقد بکتر پیده بیره بیره داده داده داده داده در		- 100 100 100 100 100 100 100 100 100 10
Clerical	5	39.6	7.09	3.64	0.28	N.S.

Significance of 't' at .95 * 2×92 , .91 * 2.69 for df 4, 45.

The 't' value for the difference between means of S.R. of Group 1 and 2 is 3.90 which is significant.

The 't' value for the difference between Group 1 and 3 is their S.R. is 7.38. This value of 't' is significant.

The 't' value for difference in means of S.R. for groups 1 and 4 is 7.43 which is significant.

The 't value for the difference between groups 1 and 5 in their S.R. is 7.64 which is significant.

Between group 2 and 3 the 't' value for the difference in S.R. is 2.75. This value of 't' is significant too.

For the differences between groups 2 and 4 in their S.R. the it value is 3.31 which is also significant.

Between groups 2 and 5 the 't' value for difference in S.R. is 3.84. This value of 't' is significant.

For the difference between groups 3 and 4 in their S.R. the 't' value is 1.16 which is not significant.

Between groups 3 and 5 the 't' value for the difference in S.R. is 1.70. This value of 't' is also not significant.

For the difference between groups 4 and 5 in their S.R. the 't' value is 0.28 which is not significant.

Testing of Hypothesis 6.3

The null hypothesis G.3 states that there is no significant difference in the S.R. of Preschool children with different levels of Economic status. The technique used to test the hypothesis is the one way classification of analysis of variance (ANOVA).

The criterion used for classifying the scores of the S.R. of children was on the basis of different levels of E.S. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.103
SUMS OF SQUARES AND MEAN VARIANCES

Source	d f	Sums of Square	Mean Square	F
and the second control of the second of the	_== 4 + 140 === 1			
Between Groups	3	4713.07	1571.02	
·				20.49
Within Conditions	36	2760.70	76.69	
	~			

The F value for the difference among means of S.R. of High, Moderate and Low groups is 20.49 which is significant. (Significance of F at 0.05 * 2.86 and at .01 * 4.38 for df 3, 36). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low Groups in their S.R.

As the F ratio refutes the null hypothesis the 't' test is applied to find out which of the differences is significant.

MEANS AND SDS OF S.R. DF CHILDREN WITH
DIFFERENT LEVELS OF E.S.

Group	Gr,	М	SD		t Le Si	vel of gnificance
Upto 1000	1	35.7	10.24			N.S.
1001 - 3000		36.3				
1001 - 3000		_	10.24		3.88	
3001 - 5000	3			- 		
3001 - 5000	1				7.10	
5001 and above				الله الله الله الله الله الله الله الله		
1001 - 3000						
3001 - 5000	3	53.7				
1001 - 3000	2	36.3				
3001 - 5000	4	60.6	4.27			
1001 - 3000	3	53.7	10.53			N.S.
5001 and above					ے تات دنی بات سند سند دیک شام	

Significance of 't' at .05 \approx 2.02, .01 \approx 2.71 for df 3, 36.

The 't' value for the difference between means of S.R. of Groups 1 and 2 is 0.16 which is not significant.

The 't' value for the difference between Group 1 and 3 in

their S.R. 15 3.86. this value of 't' is significant.

The 't' value for difference in means of S.R. for Groups 1 and 4 is 7.10 which is significant.

The 't' value for the difference between groups 2 and 3 in their S.r. 18 4.45. This value of 't' is significant.

The 't' value for difference in means of S.R. for Group 2 and 4 is 9.86. This value of 't' is also significant.

The 't' value for the difference between groups 3 and 4 is 1.92. This value is not significant.

Testing of Hypothesis 6.4

Hypothesis G.4 in the null form states that there is no significant difference in the S.R. of Preschool children and Number of Siblings. The difference among the means of S.R. of children with different levels of N.S., are tested for significance using the ANOVA.

The criterion for classifying the scores of the S.R. of children was on the basis of N.S. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.105

SUMS OF SQUARES AND MEAN VARIANCES

و جوال درسه مندر ابن و بالحدد التين موادا الأند ميه العدد ابني	na. 1767 1677 The first data (1764 1674)	والمام المام مواه مامام المام	يس جيد بين بين هي نصر اين، ساء شا هي جي هي جي	ڪيو هڪ بجيد عبيد ميد
Source	df	Sums of Square	Mean Square	F
Between Groups	3	2725.88	909.63	
Within Conditions	36	478ð.50	132.79	6.84

The value of F which is 6.84 is significant (significance for F at .05 = 2.86 and .01 = 4.38 for df 3, 36). The obtained evidence does not support the null hypothesis of no significant difference among means of S.R. Hence the hypothesis is rejected. There is a significant difference in the S.R. of children.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS & SDs OF S.R. OF CHILDREN AND N.S.

Number of Siblings						Significance
3 and above					1	
1-2 siblings						N.S.
3 and above						
1 sibling	3	51.7			3.04	
3 and above	1	35.7				at and and one and the rat after our made days below the
N1 1	4	56.4	12.15		3.81	-
1-2 siblings	2	40.8	7.40			های میچه هونی ودی زبان مشا طبع بوده هوده بالله هیا، شم
1 sibling					2.52	
1-2 siblings						in en mai en en en en en en en eñ
Nil			12.15	4.51		
1 sibling						
N1 1	4	56.4	12.15			N.5.
و باده هیار حید نیزه بلند باید کنی ۱۹۹۶ شنار حید بیار حید						

Significance of 't' at .05 = 2.02, .01 = 2.71 for df 3, 36.

The 't' value for the difference between means of S.R. of Groups 1 and 2 is 1.13 which is not significant.

The 't' value for the difference between Group 1 and 3 in their S.R. is 3.04. this value of 't' is significant.

The 't' value for difference in means of S.R. for groups 1 and 4 is 3.81 which is significant.

The 't' value for the difference between Group 2 and 3 in their S.R. is 2.52. This value of 't' is significant.

The 't' value for difference in means of S.R. for groups 2 and 4 is 3.46 which is significant.

The 't' value for the difference in groups 3 and 4 in their S.R. is 0.91 which is not significant at any level.

Testing of Hypothesis G.5

The null hypothesis G.5 states that there is no significant difference in the S.R. of Preschool children from different Residential Areas. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA).

The different residential areas of children were used as criterion to classify the S.R. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANDVA.

TABLE 5.107

SUMS OF SQUARES AND MEAN VARIANCES

Source	df	Sums of Square	Mean Square	F
Between Groups	3	4830.50	1610.17	
Within Conditions	36	5525.00	153.47	10.49
		Y		

s.R. of High, Moderate and Low Groups is 10.49 which is significant (significance of F at .05 = 2.86 and at .01 = 4.38 for df 3, 36). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low groups in their S.R.

As the F ratio refutes the null hypothesis the 't' test is applied to find out which of the differences is significant.

TABLE 5.108

MEANS AND SDS OF S.R. OF CHILDREN FROM

DIFFERENT R.A.

Group	Gr.		SD			Level of Significance
Dharavı/ Labour Camp		27.8				
CGS/Koliwada	2	51.9	15.48	5.84	4.12	S
Dharavı/ Labour Camp	1	27.8	10.10			
				5.01	4.95	S
Matunga		52.6	12.22			
Dharavı/ Labour Camp	1	27.8	10.10			
				4.04	6.65	S
510n		54.7				الله الله الله الله الله الله الله الله
CGS/Koliwada					0.11	
Matunga	3		12.22		ت شاه کند سم پیش چند ب	ورس ويود عيد شديد أنصاء عدد يدبدو ما الألاد است الرب الله الله ال

TABLE	5.108	100	Contd.

		4× == += += += += +=	· · · · · · · · · · · · · · · · · · ·			
Group	Gr.	M	SD	SED	t Level Sign	of ificance
CG5/Koliwada	2	51.9	15.48	5 40	0.51	N.S.
Sion	4	54.7	7.85	, 3 . 47	U.JI	10,0,
Matunga	3	52.6	12.22	4.59	0.46	N.S.
Sion	4	54.7	7.85	₩ . U 7	V:70	

Significance of 't' at .05 = 2.02, .01 = 2.71 for df 3, 36.

The 't' value for the difference between means of S.R. of Groups 1 and 2 is 4.12 which is significant.

The 't' value for the difference between Groups 1 and 3 in their S.R. 1s 4.95. This value of 't' is significant.

The 't' value for difference in means of S.R. for Groups 1 and 4 is 6.65 which is also significant.

The 't' value for the difference between Groups 2 and 3 in their S.R. is 0.11 which is not significant.

The 't' value for difference in means of S.R. for groups 2 and 4 is 0.51 which is also not significant.

The 't' value for the difference between groups 3 and 4 in their S.R. is 0.46 which is not significant too.

Conclusion

The results of the analysis enable us to conclude that H.B. is an important determinant for S.R. All

the different components of H.B. i.e. the Parents Education (P.E.), Mothers Education (M.E.), Fathers Education (F.E.), Mothers Occupation (M.O.), Fathers Occupation (F.O.), Economic status (E.S.), Number of siblings (N.S.) and the Residential Area (R.A.) are all associated with S.R. of P.S.C.

The higher the scores in H.B. obtained, higher is the S.R, lower the scores in H.B. lower is the S.R. The high scorers in S.R. significantly differ in their H.B. from the low S.R. scorers.

This goes to prove that a conductive H.B. and stimulating and nurturing environment help promote S.R. Children with high level of H.B. significantly differ in the S.R. from children with low levels of H.B. at .01 level. Between the High and Moderate levels of H.B. they differ significantly at .01 level but the Moderate and Low levels the difference is not significant.

PARENTAL INVOLVEMENT

As discussed earlier in Chapter 1 an interview schedule was prepared to elicit more information on various aspects of 'Home Environment'. Parental Involvement included the following aspects and totalled to 180 scores. They are:

		Scores
Attitude to Child Rearing	(A.C.R.)	30
Actual Handling	(A.H.)	30
Expectations of Parents	(P.E.)	30
Inter-Personal relationship	(I.P.R.)	30
Facilities Provided and	(F.P.)	30
Preparation of the child	(P. C.)	30
Total		180

Testing of hypothesis H.1.a

Hypothesis H.1.a. in the null form states that there is no significant difference in the S.R. of Preschool children with different levels of P.I. The difference among the means of S.R. of children with different levels of P.I. are tested for significance using the ANOVA.

The criterion used for classifying the scores of the S.R. of children was on the basis of different levels of P.I. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Amova.

SUMS OF SQUARES AND MEAN VARIANCES

\$15 AND THE REAL PROPERTY WAS THE WAY THE PASS THAT	مراه جنوب بودي الحك الأحك ماحد الحك الماد	لا فيزية غلوه بوس ودي حجة فيزنه طابع طبي منص يندن ودف فسير ارسن يجب وجي الشر الشر	الله الله هم حجم والله اللها أمينا أمين جهم إلكن إلكن بمثل أميل عبين بعبر واحد اللحد الله أن
Source	df	Sums of Square	Mean Square F
Between Groups	2	2293.07	1146.53
Within Conditions	27	1216.80	4507
and the same of the same and the same and the same and		والمراجع المراجع المراجع المراجع المراجع المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة	الله والله الله المراجعة الله والله عليه المراجعة الله الله المراجعة الله الله الله الله الله الله الله الل

The value of F which is 25.44 is significant (aignificance for F at 0.05 * 3.35 and .01 * 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of S.R. Hence the hypothesis is rejected, there is a significant difference in the S.r. of children with different levels of P.I.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS AND SDS OF S.R. OF CHILDREN WITH

DIFFERENT LEVELS OF P.I.

Graup	M	SD	SED	t	Level of Significance
High P.I.	72.0	5.44	2.93	3.89	Sig.
Moderate P.I.	60.6	7.50			
High P.I.	72.0	5.44	4.31	4,96	Sig
Law P.I.	50.6	12.50			
Moderate P.I.	60.6	7.50	4.61	2.17	Sig at .05
Low P.I.	50.4	12.50	وجين ينتيك است والود جوزاة نوسة اللك ا		

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2,27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 3.89 which is significant at .01 level.

The 't' value for the difference between High and Low groups in their S.R. is 4.96. This value of 't' is significant.

The 't' value for difference in means of S.R. for Moderate and Low levels is 2.17 which is significant at .05 level.

festing of Hypotherias H. 1.b.

The null hypothesis H.1.b. states that there is no significant difference in the S.R. of Preschool children with different levels of A.C.R.. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA).

The scores of A.C.R. obtained by children at different levels were used as criterion to classify the S.R. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.111
SUMS OF SQUARES AND MEAN VARIANCES

والله والله ومن والله والله عبد حب الله والله عنه الله الله		والمؤافظة فرده والك والمؤافظة والمؤافظة والمؤافظة والمؤافظة والمؤافظة والمؤافظة والمؤافظة والمؤافظة		
Source	df	Sums of Square	Mean Square	F
سنب وبها والمرا للماء ويست ميس ماي ودال كالله فالله فالم وماي الماء	والمراجعة المحاجمة المحاجمة المحاجمة المحاجمة المحاجمة	المنا بيس فيت فيض فيث كثال فحور وهو وهوا وهوا وهوا وهو وهو المنا وهوا ميث وهوا المنا وهوا وهوا وهوا	ا هلية فيامة بياحة حجه لويت فاحار عبدة اللهة الجيار فاحدة مراش بعين يليني يجاذ	
Between Groups	2	2250.20	1125.10	
- 				7.28
Within Conditions	27	4172.10	154.52	
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	ا المانة المانة المانة المانة المانة المانة المانة المانة المانة	كانة الرؤاء والحد المرت حائد عداد لمها مصدر جس نواته يحض جديم قاداد حاسد مجها يجدد اجري بجدا	البيمة كبيمة خلافة فالبيد البيدة أنتجة المناه البيدة البيد	

The F value for the difference among means of S.R. of High, Moderate and Low Groups is 7.20 which is significant (significance of F at .05 = 3.35 and at .01 =5.49

for df 2, . ''. Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low Groups in their S.R.

As the F ratio refutes the null hypothesis the 't' test is applied to find out which of the differences is significant.

MEANS AND SDS OF S.R. OF CHILDREN WITH
DIFFERENT LEVELS OF A.C.R..

			140 to 161 fit all 151 kg kg kg	. بلنط لبلي بلني جوي فينس کانه بنوي و	خوادر اورید باسد است. اشده داند جازان بینید جدید انتیان طب حجب بید
Group	M 	SD	SED	t !	Level of Significance
High A.C.R.	72.8	10.04			
			5.05	2.69	Sig.at .05
Moderate A.C.R.	59.2	12.42	فنے اللہ جب داند کا اللہ سنا دیں سند سے	بة طلعم فيحم عجام ياطلة حجيد مشراة يوبيله ا	وفقيه يتمور بايتين وشدم ينتك مناه خنسه سجو له تك احدث جالان ساعد الله
High A.C.R.	72.8	10.04	5.55	3.76	Sig. at .01
Low A.C.R.	51.9	14.41			019. 20 10.
Moderate A.C.R.	59.2	12.42	6.02	1.21	Not Sig.
Low	51.9	14.41	نائع وجو ويوا	. agin ang any 1920 Spin Prin State	إنْكُمْ وَنِيْنَ لِوْلَدُ لِكُمْ الْمِنْ الْمِنْ الْمِنْ الْمَنْ الْمُنْ مِنْنِ الْمِنْ مَنْنِ الْمِنْ

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 2.69 which is significant at .05 level.

The 't' value for the difference between High and Low groups in their S.R. is 3.76. This value of 't' is significant.

The 't value for difference in means of S.R. for Moderate and Low levels is 1.21 which is not significant.

Testing of Hypothesis H.1.c.

Hypothesis H.1.c. in the null form states that there is no significant difference in the S.R. of Preschool children with different levels of A.H. The difference among the means of S.R. of children with different levels of A.H. are tested for significance using the ANDVA.

The criterion used for classifying the scores of the S.R. of children was on the basis of different levels of A.H. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

SUMS OF SQUARES & MEAN VARIANCES

TABLE 5.113

Source	df	Sums of Square	Mean Square	F
		ماية الكان الك - الكان	والله المراه والمراه والمراه والمراه المراه	واله ويتو في كية أسد سي الد
Between Groups	2	3894.07	1947.03	10.25
Within Conditions	27	5130.90	190.03	10.25

The value of F which is 10.25 is significant (significance for F at 0.05 = 3.35 and .01 = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of S.R. Hence the hypothesis is rejected. There is a significant difference in the S.R. of children with different levels of A.H.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.114

MEANS & SDs OF S.R. OF CHILDREN WITH

DIFFERENT LEVELS OF A.H.

Group	M	SD	SED	t	Level of Significance
High A.H.	78.1	9.29	4.76	3.05	Sig.
Moderate A.H.		11.84			
High A.H.	78.1	9.29	6.37	4.38	Sıg.
Low A.H.	50.2	17.88			
Moderate A.H.	63.6	11.84	6.78	1.98	Nat Sig.
Low A.H.	50.2	17.88			

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 3.05 which is significant at both the levels.

The 't' value for the difference between High and Low groups in their S.R. is 4.38. This value of 't' is significant.

The 't' value for difference in means of S.R. for Moderate and Low levels is 1.98 which is not significant at any level.

Testing of Hypothesis H.1.d.

The null hypothesis H.1.d. states that there is no significant difference in the S.R. of Preschool children with different levels of E.P. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA)

The scores of E.P. obtained by children at different levels were used as criterion to classify the S.R. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.115
SUMS OF SQUARES & MEAN VARIANCES

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Source	df	Sums of Square	Mean Square	F
Between Groups	2	2814.47	1407.23	
Within Conditions	27	4763.00	176.41	7.99
a		ا على المال ا		

The F value for the difference among means of S.R. of High, Moderate, and Low groups is 7.98 which is significant (significance of F at .05 = 3.35 and at .01 = 5.49 for df 2 & 27). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low Groups in their S.R.

As the F ratio refutes the null hypothesis. the 't' test is applied to find out which of the differences is significant.

MEANS AND SDS OF S.R. OF CHILDREN WITH

DIFFERENT LEVELS OF E.P.

Group	M	SD	SED	t	Level of Significance	
High E.P.	71.4	5,12	5.06			
Moderate E.P.	60.5	15.16	5.00	2.15	Sig. at .05	
High E.P.	71.4	5.12	6.48	·	di wali sape dada kum désa jaga king daga yang daga kala alam dan	
Low E.P.	47.7	19.84	0.40	3.66	Sig	
Moderate E.P.	60.5	15.16	7 00	1.62	Not Sig.	
Low E.P.	47.7	19.84	7.90			

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 2.15 which is significant at .05 level.

The 't' value for the difference between High and Low groups in their S.R. is 3.66. This value of 't' is significant at both levels.

The 't' value for difference in means of S.R. for Moderate and Low levels is 1.62 which is not significant.

Testing of Hypothesis H.1.e.

Hypothesis H.1.e. in the null form states that there is no significant difference in the S.R. of Preschool

children with different levels of I.P.R. The difference among the means of S.R. of children with different levels of I.P.R. are tested for significance using the ANOVA.

The criterion used for classifying the scores of the S.R. of children was on the basis of different levels of I.P.R. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.117

SUMS OF SQUARES AND MEAN VARIANCES

Source	df	Sums of Square	Mean Square	F		
			ر برده کم مادا شدر ده جمه بین می هم مادان این بین بین اس ای این این این این این این این این این	44 july 1-24 july 254 july 1544		
Between Groups	2	2960.07	1480.03			
•				10.20		
Within Conditions	27	3887.30	143.97			

The value of F which is significant (significance for F at .05 = 3.35 and 0.01 =5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of S.R. Hence the hypothesis is rejected. There is a significant difference in the S.R. of children with different levels of I.P.R..

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.118

MEANS AND SDS OF S.R., OF CHILDREN WITH

DIFFERENT LEVELS OF I.P.R.

Graup	М	SD	SED	t	Level of Significance
High I.P.R.	71.7	5.97	4.23	3.76	Sig.
Moderate I.P.R.		11.96			
High I.P.R.		5.97	4.93	4.85	S19.
Low I.P.R.		14,39			
Moderate I.P.R.		11.96	5.92	1.35	Not Sig.
Low T.P.R.	47.6	14.39			وسيع ومن مند مدر ميد بي من وي من وي وي وي وي وي وي وي

Rignificance of 't' at .05 = 2.04 , .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 3.76 which is significant.

The 't' value for the difference between High and Low groups in their S.R. is 4.85. This value of 't' is significant.

The 't' value for difference in means of S.R. for Moderate and Low levels is 1.35 which is not significant.

Testing of Hypothesis H.1.f.

The null hypothesis H.1.f. states that there is no significant difference in the S.R. of Preschool children with different levels of F.P. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA).

The scores of F.P. obtained by children at different levels were used as criterion to classify the S.R. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.119
SUMS OF SQUARES AND MEAN VARIANCES

	or particular from the part party great	و پیند کنیا چیپ تیزی پیاد ساند سید میپن کنید اینک کپارا پیش کیرو شدر اسید و ادر اینات سید اینان است		
Source	d†	Sums of Square	Mean Square	F
		د منظم المان الأكل عام وبدار دولي مولد أنها المان المان - المان		
Between Groups	2	2625.00	1312.50	
Within Conditions	27	4413.70	163.47	8.03
A		داد و الله الله الله الله الله الله الله ال		ابي کاهنا وحد نبت سنره جب د

The F value for the difference among means of S.R. of High, Moderate and Low Groups is 0.03 which is significant (significance of F at .05 = 3.35 and at .01 = 5.49 for df 2, 27). Therefore the null hypothesis of no

There is a significant difference among the High, Moderate and Low groups in their S.R.

As the F ratio refutes the null hypothesis, the 't test is applied to find out which of the differences is significant.

TABLE 5.120

MEANS AND SDS OF S.R. OF CHILDREN WITH

DIFFERENT LEVELS OF F.P.

Group	M	SD	SED	t	Level of Significance
High F.P.	73.4	10.66	5.32	2.82	Sig.
Moderate F.P.	58.4	13.02			
High F.P.	73.4	10.66	5.83	3.86	Sig.
Low F.P.	50.9	15.03			
Moderate F.P.	58.4	13.02	6.29	1.19	Not Sig.
Low F.P.	50.9	15.03	u- 2	عبد مساور المار	الله يحدد شدا الحدد عند بالله الله الله عند الله عند الله الله الله الله الله

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 2.82 which is significant.

The 't' value for the difference between High an Low groups in their S.R. is 3.86. This value of 't' is significant.

The 't' value for difference in means of S.R. for Moderate and low levels is 1.19 which is not significant.

Testing of Hypothesis H.L.g.

Hypothesis H.1.g. in the null form states that there is no significant difference in the S.R. of Preschool children with different levels of P.C. The difference among the means of S.R. of children with different levels of P.C. are tested for significance using the ANOVA.

The criterion used for classifying the scores of the S.R. of children was on the basis of different levels of P.C. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.121
SUMS OF SQUARES AND MEAN VARIANCES

** **********		ويع المراجع ال		
Source	df	Sums of Square	Mean Square	F
Between Groups	2	2554.40	1277.20	8.17
Within Conditions	27	4222.30	156.38	

The value of F which is significant (significance for F at .05 = 3.35 and 0.01 = 5.49 for df 2, 27). The obtained evidence does not support the null

hypothesis of no significant difference among means of S.R. Hence the hypothesis is rejected. There is a significant difference in the S.R. of children with different levels of P.C.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.122

MEANS AND SDS OF S.R. OF CHILDREN WITH

DIFFERENT LEVELS OF P.C.

Group	М	SD	SED	t	Level of Significance
High P.C.	71.3	2.90	4.78	2.30	Sig. at .05
Moderate P.C.	60.3	14.83			
High P.C.	71.3	2.90	6.02	3.75	Sig.
Low P.C.	48.7	16.83			
Moderate P.C.	60.3	14.83	7,58	1.53	Not sig.
Law P.C.	48.7	18.83			والمجار والمار والم

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of S.R. of High and Moderate groups is 2.30 which is significant at .05 level.

The 't' value for the difference between High and Low groups in their S.P. 15 3.75. This value of 't' is significant at .01 level.

The 't' value for difference in means of S.R. for Moderate and Low levels is 1.53 which is not significant.

Conclusions and Discussions:

Parental Involvement emerges as one of the significant factor influencing S.R. Children with high scores in S.R. seem to be with high P.I. and vice versa. In each of the component of P.I. too the same results can be observed. Children from high P.I. category differ from low P.I. category significantly in their S.R. at .01 level in each of the component. Between the High and Moderate levels of P.I. the difference in S.R. is significant at .01 level in Actual Handling (A.H.). Inter personal relations (I.P.R.) and Facilities provided (F.P.) but Attitude to Child Rearing (A.C.R.), Parental Expectations (P.E.) and preparation of the Child (P.C.) the significance is at .05 level.

The results are not surprising considering the fact that 'Parental Involvement' will automatically nurture aspects necessary for S.R. and stimulate the cognitive faculties. Parental Involvement in the child in itself provides the conducive environment necessary for optimum development.

TESTING OF HYPOTHESIS OF DIFFERENCE IN A.A. ON THE BASIS OF

Testing Hypothesis I.1.a.

Hypothesis I.i.a. in the null form states that there is no significant difference in the A.A. of Preschool children with different levels of P.I. The difference among the means of A.A. of children with different levels of P.I. are tested for significance using the ANOVA.

The criterion used for classifying the scores of the A.A. of children was on the basis of different levels of P.I. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing Anova.

TABLE 5.123
SUMS OF SQUARES AND MEAN VARIANCES

	a we drive with mire trad it in man in the special	والمراجعة	ه که است های بیش میت چیز هند است جین ویشه می ت دار د ه	
Source	df	Sums of Square	Mean Square	F
Between Groups	2	25454.47	12727.23	16.78
Within Conditions	27	20479.70	758.51	
			معا ميد الله المد المد المد المد المد المد المد المد	

The value of F which is 16.78 is significant (significance for F at 0.05 = 3.35 and .01 = 5.49 for df 2, 27). The obtained evidence does not support the null hypothesis of no significant difference among means of A.A. Hence the hypothesis is rejected. There is a significant difference in the A.A. of children with different levels of P.I.

As F has emerged significant it is necessary to treat the data to further process of testing. so, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS AND SDS OF A.A. OF CHILDREN WITH

DIFFERENT LEVELS OF P.I.

				مند مند شد شد شد	
Group	М	SD	SED	ŧ	Level of Significance
High P.I.	244.2	24.72	11.40	5.12	Sig.
Moderate P.I.		26.23			
High P.I.			11.57		
Low P.I.					
Moderate P.I.			11.90	0.53	Not Sig.
Low P.I.	179.5	26.98	الله الله الله الله الله الله الله الله	حجا إنت منت بال فقد منيوا	والما المالية المالية والمالية المالية المالية المالية المالية المالية المالية المالية المالية المالية

5:gn; ficance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of A.A. of High and Moderate groups is 5.12 which is significant at .01 level.

The 't' value for the difference between High and Low groups in their A.A. is 5.59. This value of 't' is significant.

The 't' value for difference in means of A.A. for Moderate and Low levels is .53 which is not significant at any level.

Testing of Hypothesis I.1.b.

The null hypothesis I.1.b. states that there is no significant difference in the A.A. of Preschool children with different levels of A.C.R.. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA)

The scores of A.C.R. obtained by children at different levels were used as criterion to classify the A.A. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

SUMS OF SQUARES AND MEAN VARIANCES

	n mai yawa usan muu muu kata daga gaga gaga	و جها بعد ابن وجاز دور احد احدا شد بلگ کید سو حدا و دور است احداد می دود وجه وجه در ا	يميا الموا كثيب كشده طاوم لمبرة منتية محمد توجه مانية ميمية البود لوايد الوايد والمارة ويون	
Source	d f	Sums of Square	Mean Square	F
	r 1645 (1655 to 11 seven help (1656 1855 from	والمنا والمن والمن مراث أمان منها أمان المنا ا	ينت إنبون وسور حلك أنكاد إنسان شنف مين وسور باران وسر جهيا إنسان النام النام النام النام النام النام	يليو بهي سيد کٽ ڪڪ کاند ناجو ۾
Between Groups	2	14711.67	7355.83	
				6.84
Within Conditions	27	29015.70	1074.66	
and other from the global part of the part plant of		ينام المراد المر	يسم مساح ينتاج للبناة خوان مستد باشار جيان جيان جيان اللها اللها اللها على حيور الله	~~~~~

The F value for the difference among means of A.A. of High, Moderate and Low groups is 6.84 which is significant (significance of F at .05 = 3.35 and at .01 = 5.49 for df 2, 27). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low groups in their A.A.

As the F ratio refutes the null hypothesis, the 't' test is applied to find out which of the differences is significant.

resting of Hypothesis J.1.c

Hypothesis I.1.c. in the null form states that there is no significant difference in the A.A. of Preschool children with different levels of A.H. The difference among the means of A.A. of children with different levels of A.H are tested for significance using the ANOVA.

The criterion used for classifying the scores of the A.A. of children was on the basis of different levels of A.H. obtained by them. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing anova.

TABLE 5.127
SUMS OF SQUARES AND MEAN VARIANCES

		منت الشقة شقة جانب عنون والن استة القابل المنت عليه والنور إيضا والله مارت بودي واري بهوا الناء 	و ۱۹۵۰ فارد مورد مورد ماهد شده مورد مورد ماه شدن بران بران درد.	
Source	df	Sums of Square	Mean Square	F
		بين الله مانك منتهد بينها بينها البني عامل وفي الدين يباول الدين الله الدين الله الدين الله المنت معنا بين	في ويهي فينظ عليه ويونه القط علية كيمة قدية كالمع ووي والمع ويه والمع والمع والمع والمع ويهم أو	
Between	2	29330.47	14665.23	
Groups				8.90
Within	27	44504.90	1648.33	
Conditions				

The value of F which is significant (significance for F at .05 = 3.35 and 0.01 = 5.49 for df 2, 27). The obtained evidence does not support the null

hypothesis of no significant difference among means of A.A.

Hence the hypothesis is rejected. There is a significant difference in the A.A. of children with different levels of A.H.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.128

MEANS AND SDS OF A.A. OF CHILDREN WITH

DIFFERENT LEVELS OF A.H.

		. — — — — — — — — — — — — — — — — — — —		ه محد مینا کاوی میپر مور پینا بُدون	
Group	М	SD	SED	t	Level of Significance
High A.H.	236.6	38.14	17.10	3.55	Sig.
Moderate A.H.	175.9	38.31			
High A.H.	236.6	38,14	17.39	4.07	Sig.
LOW A.H.	165.8	39.62			
Moderate A.H.	175.9	38.31	17.43	0.58	Not Sig.
Low A.H.	145.8	39.62		ية شارع سوي مثلن رشوق بالتن شدن يسور ر	

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of A.A. of High and Moderate groups is 3.55 which is significant.

The 't' value for the difference between High and Low groups in their A.A. 15 4.07. This value of 't' is significant.

The 't' value for difference in means of A.A. for Moderate and Low levels is 0.58 which is not significant.

Testing of Hypothesis I.1.d.

The null hypothesis I.1.d. states that there is no significant difference in the A.A of Preschool children with different levels of E.P. The technique used to test the hypothesis is the one-way classification of analysis of Variance (ANOVA)

The scores of E.P. obtained by children at different levels were used as criterion to classify the A.A. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

SUMS OF SQUARES AND MEAN VARIANCES

TABLE 5.129

~		على المراجع ا المراجع المراجع	محد نميد محدد لحدد بيمنا كيام شاهد شاك بيمنا يامنا المال حال يوند شاه ما	
Source	df	Sums of Square	Mean Square	F
·		ا کالی میلی کیارہ کیا کہ درجی کی میں جس میں جب کی درجی		
Between Groups	2	25889.07	12944.53	m 45
Within Conditions	27	42650.40	1579.64	8.19

The F value for the difference among means of A.A. of High, Moderate, and Low Groups is 8.19 which is significant (significance of F at .05 = 3.35 and at .01 = 5.49 for df 2, 27). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low Groups in their A.A.

As the F ratio refutes the null hypothesis, the 't' test is applied to find out which of the differences is significant.

MEANS AND SDS OF A.A. OF CHILDREN WITH
DIFFERENT LEVELS OF E.P.

Group	M	sp	SED	t	Level of Significance
High E.P.	226.6	38.82	16.35	3.67	Sıg.
Moderate E.P.		34.14		y agai nasi aya mab ngin wak dain si	الأخل التناق المالية الأنتان المالية ا
High E.P.		39.82	16.41	3.93	Sig.
LOW E.P.		34.42		ت مدة زجه بجد عدر مرد پسر بندر ب	شاوية منتاة شاك المنا المنا على منت عماد مناه والمنا المنا المنا المناه المناه المناه المناه المناه
Moderate E.P.		34.14	15.33	0.29	Not sig.
Low E.P.	162.2	34.42		تعاوية وليان فليف فلسان فالان والان والداء	تحارب كالمنا والمنافع المنافع والمنافع والمنافع المنافع والمنافع و

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of A.A. of High and Moderate groups is 3.67 which is significant.

The 't' value for the difference between High and Low groups in their A.A. is 3.93. This value of 't' is significant.

The 't' value for difference in means of A.A. for Moderate and low levels is 0.29 which is not significant.

Testing of Hypothesis I.1.e

Hypothesis I.1.e. in the null form states that there is no significant difference in the A.A. of Preschool children with different levels of I.P.R.. The difference among the means of A.A. of children with different levels of I.P.R. are tested for significance using the ANDVA.

The criterion used for classifying the scores of the A.A. of children was on the basis of different levels of L.P.R. obtained by their parents. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANDVA.

TABLE 5.131
SUMS OF SQUARES & MEAN VARIANCES

		त करते केना निया तथा तथा तथा, द्वारा काल काल प्रमुप स्थान प्रमुप प्रमुप स्थान स्थान स्थान स्थान स्थान स्थान स	من المحمد ا	The last that law 1999 the
Source	df	Sums of Square	Mean Square	F
* *** == -4 (** 42 (** ** ** ** ** ** ** ** ** **		الله الله الله الله الله الله الله الله	ينها جين کيان مدم بيان مرت سي سند جين جين جين الدي	
Hetween Groups	2	18041.27	9020.63	
				9.18
Within Conditions	27	26522.10	982.30	

The value of F which is 9.18 is significant significance for F at .05 = 3.35 and .01 = 5.49 for df 2, .7). The obtained evidence does not support the null hypothesis of no significant difference among means of A.A. Hence the hypothesis is rejected. There is a significant difference in the A.A. of children with different levels of 1.P.R..

As I has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

TABLE 5.132

MEANS AND SDS OF A.A. OF CHILDREN WITH

DIFFERENT LEVELS OF I.P.R..

Group	М	SD	SED	t	Level of Significance
High I.P.R.	257.2	23.83	0.98	4.88	Sıg.
Moderate I.P.R.	213.4	15.44			
High I.P.R.	257.2	23.63	9.97	5.77	Sıg.
Low I.P.R.	199.7	20.64			
Moderate I.P.R.	213.4	15.44	8.15	1.68	Not sig.
Low I.P.R.	199.7	20.64	inne saja jaliy siler pena lidik d	وجواء بالراء مانته والإن ووا	المارة والمارة

Significance of `t' at .05 = 2.04, .01 = 2.77 for df 2, 27.

The 't' value for the difference between means of A.A. of High and Moderate groups is 4.88 which is significant.

The 't' value for the difference between High and Low groups in their A.A. is 5.77. This value of 't' is significant.

The 't' value for difference in means of A.A. for Moderate and Low levels is 1.68 which is not significant.

Testing of Hypothesis I.1.f.

The null hypothesis I.1.f. states that there is no significant difference in the A.A. of Preschool children with different levels of F.P. The technique used to test the

hypothesis is the one way classification of analysis of variance (ANDVA)

The scores of F.P. obtained by parents at different levels were used as criterion to classify the A.A. scores. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.133
SUMS OF SQUARES AND MEAN VARIANCES

		Affilia and as A. Seef was 1970 then in B. Affilia your Mark Agen, when Affilia agent with Affilia	من الميان ا	arch seri van gevi dem desk
Saurce	d f	Sums of Square	Mean Square	F
Between Groups	2	31528.47	15764.23	9.03
Within Conditions	27	47125.00	1745.37	
		ب معهد عليك بلنان الكراء المدار بالمدار المدار المدار المدار ومن شيئة منها هيدار الهم فهيد يشدر	يستان فالمن ماليان والمن ماليان فياما فيمان أنجان الماليان والمن وماليان والمناز والمناز والمناز والمناز	

The F value for the difference among means of A.A. of High, Moderate and Low Groups is 9.03 which is significant (significance of F at .05 = 3.35 and at .01 = 5.49 for df 2, 27). Therefore the null hypothesis of no significant difference among means does not stand tenable. There is a significant difference among the High, Moderate and Low Groups in their A.A.

As the F ratio refutes the null hypothesis the to test is applied to find out which of the differences is significant.

MEANS AND SDS OF A.A. OF CHILDREN WITH
DIFFERENT LEVELS OF F.P.

		44 D-10 MIN DE -UN 1866 E-197 AND END HAVE NOW	یس سے بہت سے سے میں سے دی شدر سے	***************************************	اللك كياب يمن منه كمن المن المن المن منه المن الله المن الله الله
Group	М	SD	SED	t	Level of Significance
High F.P.	256.6	36.28	15.23	4.14	Sig.
Moderate F.P.	193.5	31.68			
High F.P.	256.6	36.28	15.57	4.71	Sig.
low F.P.	183.3	33.28			
Moderate F.P.	173.5	31.68	14.53	0.70	Not sig.
low F.P.	183.3	33.28			معيد جميد منهم معادي خالجة يعيد بدياناً فابتيا فعيد بدياناً

Significance of 't' at .05 = 2.04, .01 = 2.77 \cdot for df 2, 27.

The 't' value for the difference between means of A.A. of High and Moderate groups is 4.14 which is significant.

The 't' value for the difference between High and Low groups in their A.A. is 4.71. This value of 't' is significant.

The 't' value for difference in means of A.A. for Moderate and Low levels is 0.70 which is not significant.

lesting of Hypothesis liling

The null hypothesis I.1.q. states that there is no significant difference in the A.A. of Preschool children with different levels of P.C. The difference among the means of A.A. of children with different levels of P.C. are tested for significance using the ANOVA.

The triterion used for classifying the scores of the A.A. of children was on the basis of different levels of p.C. obtained by their parents. As the size of the sample is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

TABLE 5.135

<u>ŞUMS</u>	<u>OF</u>	SQUARES	<u>&</u>	MEAN	VARIAN	<u>ces</u>
		and the and the few way that				

	<u>SUMS</u> D	F SQUARES & TELE	يدي موسور المعمل بالبعد والمدر مساور مدود مدود والمدر المعمل المعمل المعمل المعمل المعمل المعمل المعمل المعمل	n pien weig fierd pape wind man
ور الله الله الله الله الله الله الله الل	Market A the state of A	e Cruare	Mean Square	F
Source	df	Sums of Square	كالما المالية منابة منابة والمالة والمالة والمالة والمالة المالية والمالة والمالة والمالة والمالة والمالة	وهم نبيع جيد على منه جمع نحم
and and any one or any or at	B 1 1-144 - 144 - 1-144 - 1-1	, 4(m) (m) (m) (m) (m) (m) (m) (m) (m) (m)	14862-93	
Hetween	2	29725. ⁸⁷		8.73
Groups			1702.37	
Within	27	45964.00		
Londitions		والم وارد والله الله الله الله الله الله الله الل	والمراو ويساء فيما ويبدأ ويبدأ ويما ويمان المراه أمان والمال والمال المال والمال المال المال المال المال المال	
	ويون شور ميس جيد بيدو يدون	A Second State of Second Secon		ificant

The value of F which is 8.73 is significant (significance for F at .05 = 3.35 and .01 = 5.49 for df 2,

The obtained evidence does not support the null hypothesis of no significant difference among means of A.A. Hence the hypothesis is rejected. There is a significant difference in the A.A. of children with different levels of p.C.

As F has emerged significant it is necessary to treat the data to further process of testing. So, the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS AND SDS OF A.A. OF CHILDREN WITH

DIFFERENT LEVELS OF P.C..

				هجه مین پرس است بحث مدید درد سپ	ميد اين نين بدر بدر من بدر در
	M	SD	SED	t Siç	Level of
High P.C.	245.0	34.15	16.15	3.62	Sig.
Moderate P.C.	186.6	37.97	ي بدائرة والمد سيد راجية بصد إعام فصد الما محد ال	أرمين ليفرد ينمه ميله يملط فلملا ممار تحيق	, प्रोक्टा स्मृत्युं प्रथम कार्यः कृतान प्रथमः प्रथमः प्रथमः प्रथमः प्रथमः
High P.C.	245.0	34.15	16.78	4.34	Sig.
Low P.C.	172.2	40.61	والمراجع والم والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراع	pipe jight pipe pipe kipe pipe spipe spipe	giant diese deut beier gene aber zone gene gene deut deut
Moderate P.C.	186.6	37.97	17.58	0,€2	Not #19
LOW P.C.	172.2	40.61	سنة تعامد جناب جناب بخود بالمد المام ا	त्युक्तं कृतिकृतं प्रतिकृतं कृतिक कृतिकृतं विकृतं वस्ति व्यक्तां व्यक्ताः	01 = 2.7
			05 میں	2.04,	.Q1 = 21/

Significance of 't' at .05 = 2.04, .01 = 2.77 for df 2. 27.

The 't value for the difference between means of A.A. of High and Moderate groups is 3.62 which is significant.

The 't value for the difference between High and Low groups in their A.A. is 4.34. This value of 't' is significant.

The 't' value for difference in means of A.A. for Moderate and Low levels is 0.82 which is not significant.

Conclusions and Discussions

The results seem to emphatically highlight one very important aspect that P.I. is very essential for A.A. The children with high P.I. seem to significantly differ in their A.A. scores at 0.01 level from the Moderate and Low levels of P.I. The difference is not significant between the Moderate and Low levels. Taking the components of P.I. the High and the Moderate groups in A.C.R. differ significantly at 0.05 level whereas in all other components the significance is at 0.01 level.

I GROUP OF HYPOTHESIS

The parents of all the children were called for the interview but the responses varied. This was then coined as Parental Interest (P.Int.).

TABLE SHOWING ATTENDANCE OF PARENTS AT INTERVIEW

Only Fath	ner	† 5 9
1		i i
: Only Moth	ner	126
1		1
; Both Pare	ents	! 91
1		1
Non-Respo	undents	32
T-1	1 .	-
: Tota	1 :	308
i i		i
i		i 1
i	*	i

This shows that only 276 childrens' parents responded and the rest did not attend the interview at all. Of the 276 who responded, children's Only Fathers' came, children's Only Mothers' came and childrens' Both Parents' came.

TESTING OF HYPOTHESIS OF DIFFERENCE - S.R. ON THE BASIS OF PARENTAL INTEREST.

Testing of Hypothesis J.1.

The null hypothesis J.1. states that there is no significant difference in the S.R. of Preschool children with different levels of Parental Interest. The technique used to test the hypothesis is the one way classification of analysis of Variance (ANOVA)

The scores of S.R. obtained by children were classified on the basis of Parental Interest. Since the sample size for the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

SUMS DE SQUARES AND MEAN VARIANCES

and the self-time state to the self-time stat	•	- * · · · · · · · · · · · · · · · · · ·	ومن جمع من بالد يون لهم المن حمد بنية حمد الله الله الله الله الله الله الله الل	
Source	df	Sums of Square	Mean Square	F
			المراجعة	and tree than their min bold didge
Between Groups	35	3780.90	1260.30	i) AA
Within Conditions	36	4807.00	133.53	₩.44
		والاستعار أعمله حبيب جيد خيرة ليهما ووراً فحمد بعيدة لحمد يده وجيلا عبياة جالات خلاف فيدر بدنية بد	د علي نيف فقط كلمه النفا لنفا جدد حال نيب بيط عمار لمث حدد عدد يعد يود د	

The F value for the difference among means of Parental Interest of different groups is 9.44 which is Significant at 0.01 level (significance of F at .05 = 2.86 and at .01 - 4.38 for df 3, 36). Therefore the null hypothesis of no significant difference among means does not tand tenable. There is a significant difference among the different groups in their Parental Interest.

As the first orefutes the null hypothesis the 't' test is applied to find out which of the differences is significant.

MEANS OND SDS OF S.R. OF CHILDREN WITH DIFFERENT
LEVELS OF PARENTAL INTEREST.

TABLE 5.138

at the Interview	Gr.	M	SD	SED	t	Level of Significance
(inly Father						Sig. at .01
Only Mother	2	60.0	9.99			level
Only Father	1	45.6				Sig.at .01
Both Parents	3	66.7	6.18			level
Only Father			12.84			Not Sig.
Non Respond ents						145 200 0.011 Tage 1157 \$185, sing sing sing sing the 1144 sing sing
Only Mother						Not Sig.
Both Parents						
Only Mother			9.99			Sig.at .01
Non Respond- ents			•			
Roth Parents						Sig.at .01
Non Respond ents						16761

Significance of 't' at .05 = 2.02, .01 = 2.71 for df 3, 36.

The 't' value for the difference between means of S.R. of groups 1 and 2 is 2.80 which is significant.

The 't' value for the difference between groups 1 and 3 in

their S.R. 15 4.68. This value of 't' is significant.

The 't' value for difference in means of S.R. for groups 1 and 4 15 0.36 which is not significant.

The 't' value for the difference between groups 2 and 3 in their S.R. is 1.80. This value of 't' is not significant. Between the 'nd and 4th group the 't' value for the difference in their S.R. is 3.13 which is significant. The 't' value for difference in means of S.R. for groups 3 and 4 is 4.99 which is significant.

TESTING OF HYPOTHESIS OF DIFFERENCE - A.A. ON THE BASIS OF PARENTAL INTEREST.

Testing of Hypothesis J.2.

Hypothesis J.2. In the null form states that there is no significant difference in the A.A. of Preschool children with different levels of Parental Interest. The difference among the means of children with different levels of A.A. are tested for significance using the ANOVA.

The criterion used for classifying the scores of the A.A. of children was on the basis of different levels of farental Interest. As the size of the sample of the study is large and different groups are not comparable in size, a random sample of 10 children was taken from each group for the purpose of computing ANOVA.

DUMS OF SQUARIE & MEAN VARIANCES

TARLE 5.139

		وويستوهو والواليون بمايا والمايان	their days time green with cases of green board states with their selfs desire early	and the same
Source	ដៅ	Sums of Square	Mean Square	F
	,	48078.50	16026.17	
Coups Coups				9.81
Within	1,45	58809.00	1633.58	
Conditions		and the second s	يستو يوسع مسرد ميون مانده شويد اللغان غيب اللغان اللهاء بماند عبائد اللهاء اللهاء اللهاء اللهاء اللهاء اللهاء	ت يدن دايه فيد درن شير

The value of F which is 9.81 is significant at 0.01 level (significance of F at .05 = 2.86 and at .01 = 4.38 for df 3 & 36). The obtained evidence does not support the null hypothesis of no significant difference among means.

Hence the hypothesis is rejected. There is a significant difference in the A.A. of children with different levels of Parental Interest.

And Final emerged significant it is necessary to treat the data to further process of testing. So the critical ratio test was applied to find out which of the 3 differences is significant.

MEANS AND SDS OF A.A. OF CHILDREN WITH DIFFERENT

TABLE 5.140

Group M SD SED t Level of Signification	nc e
Only Father 170.6 38.75 15.35 4.93 Sig.at level Only Mother 246.3 29.22 Only Father 170.6 38.75	
Only Mother 246.3 29.22 Only Father 170.6 38.75	
Only Father 170.6 38.75	
15.51 4.36 Sig.at	
Both Parents 238.2 30.07	
Only Father 170.6 38.75 20.30 0.26 Not Si	9.
Non Respond- 175.9 51.20	
Only Mother 246.3 29.22 13.26 0.61 Not Sig	•
Both Parents 238.2 30.07	
Only Mother 246.3 29.22 18.64 3.78 Sig.at level	.01
Non Respond: 175.9 51.20 ents	
Both Parents 238.2 30.07 18.78 3.32 Sig.at level	.01
Non Respond: 175.9 51.30 ents	

Significance of 't' at .05 = 2.02, .01 = 2.71 for df 3, 36.

The 't' value for the difference between means of A.A. of groups 1 and 2 is 4.93 which is significant.

their A.A. 10 4.36. This value of 't' is significant.

The 't value for difference in means of A.A. for groups 1 and 4 is 0.76 which is not significant.

The 't' value for the difference between groups 2 and 3 in their A.A. 14 0.61. This value of 't' is significant.

Between the ind and 4th groups the 't' value for the difference in their A.A. is 3./8 which is significant.

The 't value for difference in means of S.R. for groups 3 and 4 is 3.32 which is significant.

Conclusions and Discussions

On the basis of the analysis it can be concluded .hat Parental Interest is an important factor influencing S.R. and A.A. of P.S.C. Children whose both parents attended the interview seem to significantly differ in their S.R. and 4.A. scores from children whose only fathers attended or from Non-respondents. There was no significant difference however with children whose only mothers attended. The category of again differed only mothers attended children whose sugnificantly from the children whose only fathers attended or were non-respondents. The difference is not significant netween both parents and only mothers, perhaps because in a traditional family in India the role of mother is wo important that it is able to provide all the necessary surturing similar to the role of both parents.

CHAPTER VI

SUMMARY AND CONCLUSIONS.

Introduction :

Education has been found to be the most important ingredient responsible for the progress of man. No society or community has ever progressed without education. Hence there is growing concern about imparting education to all, particularly to young children in the best possible manner. Since the early years are the most critical years, educationists want to know how best to educate the young children, what are the components of an educational system and most of all what are the basic essentials for optimum learning process.

"The early years of a child may well be the most crucial as far as opportunities for effective educational experiences are concerned". Bloom (1964); Clement et al (1984); Elkind (1982a); Fowler (1980a); Gray, Ramsey and Klaus (1982); Hunt (1961) and Schweinhart and Weikart (1980) to name a few, supported and confirmed the importance of

Leeper, S.N., Witherspoon, R.L., Day, B. : Good Schools for Young Children. MacMillan Rublishing Co. New York. Fifth Edition (1984) pp. 3. 1989

environmental factors in influencing the early development of the child.1. Children, especially those from low-income families need relevant experiences for proper development. It is during these years that the bases for later development are laid. Habits and attitudes learned and adapted during these years remain with the person for a life time. Infact (Rawat 1970) has examined the need of early childhood education in India in the context of its national objectives.2 He says "India as a socialist, democratic republic is committed to all its citizens right from their infancy and early childhood. In the interest of her optimum national development and progress, the highest possible development of her human resources is imperative".

Much of this learning depends on how ready the child is or made ready. These years comprise the years concerned by 'early childhood education'.

It has been found that in our educational system the curriculum and curriculum methods are pre-decided. Efforts are made to fit the child into the system, rather than the system be fitted according to the requirements of

l Elizaon, C.F., Jenkins, L.T. : A Practical Guide to Early Childhood Curriculum. Merrill Publishing Co. Columbo, Toronto, London, Melbourne. Fourth edition (1790) pp. 6.

² Grewal J.S. : Early Childhood Education. Bhargava Book House. Agra. First Edition (1984). pp. 5.

the children. Those who are not ready obviously do not fit into the system and their learning process gets affected.

The INSUE !

The relative neglect by educationists readiness and its paramount importance for learning is one of the strange paradoxes in the educational system. One wakes up when there are failures or when a child is slow learning or there are associated problems in learning. language of problems, difficulties, inadequacies and so on are familiar to all those so closely associated with learning and they want to do something about them. There are devices for correcting, by-passing or overcoming these but what about the normal average child, his capacities, capabilities? What about initiating, enhancing, stimulating, motivating and sustaining the pre-requisites of learning in him? Why not understand the aspects necessary for learning and prevent the ensuing problems due to lack of it? These remain relatively neglected in studying the emergence of competencies in thildren for learning.

Again, what about identifying potentially unready pre-school children. This would provide the base for early intervention efforts and compensatory programmes. On the positive side too the early identification of ready children in under privileged settings is of equal importance

for their optimum learning.

The Background :

A sizeable number of children at S.I.E.S. High school (pre-primary section) have been found to be having difficulties in meeting the demands of the school.

They had difficulties in paying attention, in concentrating, in comprehending, in socializing, in staying away from their mother and so on as expected at the preschool stage.

The children attending the school belong to different socio-economic class. There is tremendous discrepancy in their learning capacities due to their varying readiness level.

There are also children who come from homes which belong to the underprivileged or disadvantaged class. These children not only entered school without much motivation for learning but also lacked the necessary stimulation that is essential at this formative stage.

progressive techniques it was felt that the children were not receptive and the teachers sensed a kind of frustration with the lack of progress made. It was opined that proper insight into the capabilities of students who were ready for schooling would improve matters. Another opinion evinced was that if, through some kind of screening, the category of children admitted was ascertained, perhaps, problems revolving around their learning could be minimised and the possibility of spelling out the aspects involved was considered.

To combat all this and find some suitable solution, the researcher decided to work in the area of Readiness'. Something had to be done so that, the child's readiness and developmental aspects are taken into account along with the requirements of the schools, and young children are not subjected to a kind of exploitation, having to struggle to meet demands and expectations beyond their capacities.

Again, there are about 10% 'School failure' cases at the school. It is also recognised that many children who experience learning problems also suffer from sensory, physical, social, emotional or family problems, conditions that appear to predate school problems and render children more vulnerable to school failure. Identification of these children, at 'early school' stage, 'can lead to

intervention that could reduce the risk of school failure.

Also about 2% of children at S.I.E.S. are later discovered to be educationally handicapped who should have been identified earlier and referred for remedial-educational and related, services. An enquiry with few of the special schools also revealed that children were brought to them late and very rarely at the pre-school stage during which time much could have been done to change the course of the child's life.

Need of the Study

All children do not enter school at the same level of understanding and with the same capabilities and though chronologically, they may be at the same age level, there are some who are more advanced in their development, understanding, knowledge and capacities and are much better equipped to meet the expectations, requirements and demands of schools. There are others who may be just above average and somehow manage to scrape through. But there are a few who may have to struggle so much that they may, ultimately, lag behind and become school failures and dropouts.

There is need to identify such specific needs of children which are not being met in the existing educational

system. Since the child's future school success is strongly determined by his school readiness, a screening device which would help to point out deficits is necessary. It is very assential to provide adequate support for these children, so that the differences could be levelled and an equal start ensured for all. It is imperative to define the criteria for school readiness and find adequate measurement techniques. This will indicate what percentage of children are mature enough to take on school responsibilities. This will aid the school authorities to concentrate ways of reorganising educational functions at the beginning of school instruction so that an equal start is provided for all.

Thus, to combat the problem of children, who have initial difficulties in coping with the expectations of the school there is need to work out some strategy. It was felt that these children were not ready for schooling, not prepared for the tasks to be performed for academic learning. It was necessary, then, to investigate into the whole phenomenon. How is it that some children are neady for schooling and learning and go through swiftly whereas there are others who face innumerable impediments and lag behind in most of the tasks.

Statement of the Problem

"An Investigation into the Scholastic Readiness of Pre-School

The variables of the study are:

- 1. Scholastic Readiness
- 2. Academic Achievement
- 3. Personal Abilities
- 4. Home Background

Definitions of Terms

Readinessi

Readiness, Asubel proposed, is "the adequacy of existing capacity in relation to the demands of a given learning task".

According to C.V. Good "Readiness is willingness, desire and ability to engage in a given activity, depending on the learner's level of maturity, previous experience and mental emotional state"2. The level of development at which an individual has the capacity to undertake the learning of a specified subject of study or the age at which the average group of individuals have the specified capacity (such as reading readiness).

¹ Ausubel, D.D.: Viewpoints from Related Disciplines Human Browth and Development. Teachers College Record LX 1959. pp. 245-254.

² Good, C.V., Markel, W.R., (Ed): Qp. Cit. p. 472.

Scholastic

C.V. Good defines 'Scholastic' as "An organised group of pupils pursuing defined studies at defined levels and receiving instruction from one or more teachers frequently with the addition of the employees and officers such as a principal, various supervisors of instruction and a staff of maintenance workers usually housed in a single building or a group of buildings".

Scholastic Readiness (S.R.)

Scholastic Readiness is defined as the child's attainment of a degree of physical, intellectual, social and emotional development sufficient to enable him to fulfill school requirements and to assimilate the curriculum content.

Scholastic Readiness is 'Readiness of the child for the learning process as a whole including the maturational and developmental aspects equal to school's entry and promotional requirements.

¹ Good, C.V., Markel, W.R., (Ed): Op. Cit. p. 511.

Pre-School Child (P.S.C.)

Pre-school child is a child in the age group of 2-1/2 to 5-1/2 years - at the beginning of which the child is usually admitted to a nursery school. It is also referred to as the 'Early childhood Stage".

Pre-School Education (P.S.E.)

Pre-school education is an 'Early Childhood' programme' emphasizing the training, education and total development of the child.

The method and theory of guiding young children in a group generally refers to education demonstrated in nursery schools. Emphasis is placed on developing capacities of the individual and on helping him to meet his problems.

This general term embraces the different types of education available for the under-fives and includes nursery schools, nursery classes and pre-school play groups. In India, there is no statutory obligation for local education authorities to provide pre-school education. Hence there is lack of awareness of importance of pre-school education and resulting neglect of the same.

Academic Achievement (A.A.)

The scores obtained by the individual child in the academic performance is taken as A.A. The school conducts two Unit Tests (U.T.) one in each term and two exams at the end of the semesters (S.E.). A.A. comprises of three sub-categories — Language Scores (L.S), Number Work (N.W.) and General knowledge (G.K.). Each of the subcategory carries 100 marks totalling to 300 on the whole.

Personal Abilities (P.A.)

The child's abilities in 'Other activities' (O.A.) and Self Attributes (S.A.) were included in this.

Other activities which consisted of Painting, Drawing, Creative work, Clay and Puzzles were taken up to see how far a child is proficient in them. These activities were conducted in the school as co-curricular activities.

The self attributes like Personal Development, Mental Abilities, Social Skills and Personality Traits were graded by the teachers which were maintained in the Teacher Rating Scale.

Home Environment (H.E.)

H.E was the environment - the conditions in which the child was growing up. It comprised of two categories - Home background (H.B) and Parental Involvement (P.I.). Home background was the background of the child's home which constituted - Parental education, their occupation, Socio-economic status, number of siblings and the residential area.

P.I. was the involvement of the parents in the child's growth and development — What type of interaction and involvement is offered to the child. This P.I. was measured through 6 broad aspects which had 10 sub-aspects in it. The 6 broad aspects were Attitude to Child Rearing, Actual Handling, Inter personal relations, Expectations of Parents, Facilities provided and Preparation of the Child.

Aims of the Study:

The aims of this study can be classified into four broad categories.

Firstly, to investigate into the concept of scholastic readiness of Premachool children - what is it that

constitutes S.R., what contributes to S.R. and what are the components of S.R.

Secondly, the aim was to prepare a screening device to measure S.R. and use the tool to compare children with different levels of S.R.

Thirdly, to probe into the Home Background and Parental Involvement and their relative influence on S.R. and A.A.

Fourthly, to make suggestions to identify unreadiness and suggest ways of enhancing Scholastic Readiness.

Objectives of the Study:

- 1. To study and research in the area of S.R.
- 2. To identify areas and aspects favourable for S.R.
- To design an appropriate screening device to measure
 S.R. of P.S.C.
- 4. To find out whether screening aids in identifying children who are scholastically not ready.
- 5. To find out whether screening aids in pinpointing specific areas in which the child is scholastically unready.

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6 To enlist the components of S.R.

- 7. To identify factors responsible for S.R.
- 8. To study the relationship between S.R. and A.A.
- 9 To study the effect of S.R. on A.A.
- 10. To find the effect of S.R. on adjustment to school.
- 11. To compare children with different levels of S.R. on A.A.
- 12. To compare children with different levels of A.A. on B.R.
- 13. To study H.B. and its influence on S.R. of children.
- 14. To study H.B. and its influence on A.A. of children.
- 15. To study the effect of P.I. in their children on S.R.
- 16. To study the effect of P.I. in their children on A.A.
- 17. To study the effect of P.Int in their children on S.R.
- 18. To study the effect of P Int in their children on A.A.
- 19. To find out the differences in A.A. of children with different levels of S.R.
- 20. To find out the differences in S.R. of boys and girls.
- 21 To find out the differences in A.A. of boys and girls.
- 22. To find out the differences in S.R. of P.S.C. from different age groups.
- 23. To suggest enrichment programmes that may help children who are not ready.
- 24. To suggest intervention and compensatory programmes for children who are unready.

A Group of Hypotheses

Hypotheses of Relationship

S.R. - A.A.

B Group of Hypotheses

Hypotheses of Difference

A.A. - S.R.

C Broup of Hypotheses

Hypotheses of Difference in

S.R. - Boys and Girls

A.A. - Boys and Girls.

D. Group of Hypotheses

Hypotheses of Difference

5.R. - Age

E. Group of Hypotheses

Hypotheses of Difference

B.R. - D.A.

F Group of Hypotheses

Hypotheses of Relationship

S.R.-T.R.

G Group of Hypotheses

Hypotheses of Difference

6.R.-H.B.

H Group of Hypotheses

Hypotheses of Difference

S.R. - P.I.

I Group of Hypotheses

Hypotheses of Difference

A.A. - P.I.

J Group of Hypotheses

Hypotheses of Difference

S.R. - P. Int

A.A. - P. Int.

A Group of Hypotheses of relationship.

- A 1. a) There is no significant relationship between S.R. and A.A. of P.S.C..
 - b) There is no significant relationship between S.R. and A.A. of P.S.C. at 1 U.T..
 - c) There is no significant relationship between S.R. and A.A. of P.S.C. at 1 st S.E..
 - d) There is no significant relationship between S.R. and A.A. of P.S.C. at 2nd U.T..
 - e) There is no significant relationship between S.R. and A.A. of P.S.C. at 2nd S.E..

- A 2. a) There is no significant relationship between N.S. and A.A. of P.S.C..
 - b) There is no significant relationship between M.S. and A.A. of P.S.C. at 1st U.T.,
 - and A.A. of P.S.C. at 1 S.E..
 - d) There is no significant relationship between M.S. and A.A. of P.S.C. at 2nd U.T..
 - e) There is no significant relationship between M.S. and A.A. of P.S.C. at 2nd S.E..
- A 3. a) There is no significant relationship between C.S. and A.A. of P.S.C..
 - b) There is no significant relationship between C.S. and A.A. of P.S.C. at 1 U.T..
 - c) There is no significant relationship between C.S. and A.A. of P.S.C. at 1st S.E..
 - d) There is no significant relationship between C.S. and A.A. of P.S.C. at 2nd U.T..
 - e) There is no significant relationship between C.S. and A.A. of P.S.C. at 2nd S.E..

- A 4. a) There is no significant relationship between P.S. and A.A. of P.S.C..
 - b) There is no significant relationship between P.S. and A.A. of P.S.C. at 1 to U.T..
 - c) There is no significant relationship between P.S. and A.A. of P.S.C. at 18t S.E.
 - d) There is no significant relationship between P.S. and A.A. of P.S.C. at 2nd U.T.
 - and A.A. of P.S.C. at 2nd S.E..
- A 5. a) There is no significant relationship between C.E.L. and A.A. of P.S.C..
 - b) There is no significant relationship between C.E.L. and A.A. of P.S.C. at 1 st U.T..
 - c) There is no significant relationship between C.E.L. and A.A. of P.S.C. at 1 st. S.E..
 - d) There is no significant relationship between C.E.L. and A.A. of P.S.C. at: 2nd U.T..
 - e) There is no significant relationship between C.E.L. and A.A. of P.S.C. at 2nd S.E..

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B Group Hypotheses of Difference,

- B 1. a) There is no significant difference in the A.A. of P.S.C. with different levels of S.R.
 - b) There is no significant difference in the A.A. of P.S.C. with different levels of M.S.
 - c) There is no significant difference in the A.A. of P.S.C. with different levels of C.S.
 - d) There is no significant difference in the A.A. of P.S.C. with different levels of P.S.
 - e) There is no significant difference in the A.A. of P.S.C. with different levels of C.E.L..
- B 2. A) There is no significant difference in the L.S. of P.B.C. with different levels of S.R.
 - b) There is no significant difference in the L.S. of P.S.C. with different levels of M.S.
 - c) There is no significant difference in the L.S. of P.B.C. with different levels of C.S.
 - d) There is no significant difference in the L.S. of P.S.C. with different levels of P.S.
 - e) There is no significant difference in the L.S. of P.S.C. with different levels of C.E.L..

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- B 3. a) There is no significant difference in the N.W. of P.S.C. with different levels of S.R.
 - b) There is no significant difference in the N.W. of P.S.C. with different levels of M.S.
 - c) There is no significant difference in the N.W. of P.S.C. with different levels of C.S.
 - d) There is no significant difference in the N.W. of P.S.C. with different levels of P.S.
 - e) There is no significant difference in the N.W. of P.S.C. with different levels of C.E.L..
- B 4. a) There is no significant difference in the G.K. of P.S.C. with different levels of S.R.
 - b) There is no significant difference in the G.K. of P.S.C. with different levels of M.S.
 - c) There is no significant difference in the G.K. of P.S.C. with different levels of C.S.
 - d) There is no significant difference in the G.K. of P.S.C. with different levels of P.S.
 - e) There is no significant difference in the B.K. of P.S.C. with different levels of C.E.L..

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- C Group Hypotheses of Difference.
- c i. a) There is no significant difference in the S.R. of boys and girls.
 - b) There is no significant difference in the M.S. of boys and girls.
 - c) There is no significant difference in the C.S. of boys and girls.
 - d) There is no significant difference in the P.S. of boys and girls.
 - e) There is no significant difference in the C.E.L. of boys and girls.
- C 2. a) There is no significant difference in the A.A. of boys and girls.
 - b) There is no significant difference in the A.A. at 1^{8t} U.T. of boys and girls.
 - c) There is no significant difference in the A.A. at ist S.E. of boys and girls.
 - d) There is no significant difference in the A.A. at 2^{nd} U.T. of boys and girls.
 - e) There is no significant difference in the A.A. at 2nd S.E. of boys and girls.

- C 3. a) There is no significant difference in the L.S. of boys and girls.
 - b) There is no significant difference in the L.S. at 1st U.T. of boys and girls.
 - c) There is no significant difference in the L.S. at $i^{\rm st}$ S.E. of boys and girls.
 - d) There is no significant difference in the L.S. at 2nd U.T. of boys and pirls.
 - e) There is no significant difference in the 1.5. at 2nd S.E. of boys and girls.
- C 4. a) There is no significant difference in the N.W. of boys and girls.
 - b) There is no significant difference in the N.W. at $i^{\rm mt}$ U.T. of boys and girls.
 - c) There is no significant difference in the N.W. at $1^{\pm t}$ S.E. of boys and girls.
 - d) There is no significant difference in the N.W. at 2^{nd} U.T. of boys and girls.
 - e) There is no significant difference in the N.W. at $2^{\rm nd}$ S.E. of boys and girls.

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- C 5. a) There is no significant difference in the G.K. of boys and girls.
 - b) There is no significant difference in the G.K. at ist U.T. of boys and girls.
 - c) There is no significant difference in the G.K. at ist S.E. of boys and girls.
 - d) There is no significant difference in the G.K. at 2^{nd} U.T. of boys and girls.
 - e) There is no significant difference in the G.K. at 2^{nd} S.E. of boys and girls.

D Group Hypotheses of Difference.

- D 1. a) There is no significant difference in the S.R. of P.S.C. from different age groups.
 - b) There is no significant difference in the M.S. of P.S.C. from different age groups.
 - c) There is no significant difference in the C.S. of P.B.C. from different age groups.
 - d) There is no significant difference in the P.S. of P.S.C. from different age groups.
 - e) There is no significant difference in the C.E.L. of P.B.C. from different age groups.

E Group Hypotheses of Difference,

- E a) There is no significant difference in the O.A. of P.B.C. with different levels of S.R.
 - b) There is no significant difference in the D.A. of P.S.C. with different levels of M.S.
 - c) There is no significant difference in the O.A. of P.S.C. with different levels of C.S.
 - d) There is no significant difference in the O.A. of P.S.C. with different levels of P.S.
 - P.S.C. with different levels of C.E.L.

E Group Hypotheses of Relationship

- There is no significant relationship between S.R. of P.S.C. and T.R. on S.A.
- There is no significant relationship between S.R. of P.S.C. and T.R. on P.D.
- 3. There is no significant: relationship between S.R. of P.S.C. and T.R. on M.A.

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- 5. There is no significant relationship between S.R. of P.S.C. and T.R. on P.T.
- 6. There is no significant relationship between S.R. of P.B.C. and T.R. on K.E.

6. Group Hypotheses of Difference

- 1. There is no significant difference in the S.R. of P.S.C. with different levels of P.E.
- There is no significant difference in the S.R. of P.B.C. with different levels of M.E.
- 3. There is no significant difference in the *S.R. of P.S.C. with different levels of F.E.
- 4. There is no significant difference in the S.R. of P.S.C. with different levels of M.D.
- 5. There is no significant difference in the S.R. of R.S.C. with different levels of F.O.
- 6. There is no significant difference in the S.R. of P.S.C. with different levels of S.E.S.
- 7. There is no significant difference in the S.R. of P.S.C. with N.S.
- 8. There is no significant difference in the S.R. of P.S.C. from different R.A.

H Group Hypotheses of difference

- 1. There is no significant difference in the S.R. of P.S.C. with different levels of P.I.
- 2. There is no significant difference in the S.R. of P.S.C. with different levels of A.C.R.
- 3. There is no significant difference in the S.R. of P.S.C. with different levels of A.H.
- 4. There is no significant difference in the S.R. of P.B.C. with different levels of E.P.
- 5. There is no significant difference in the S.R. of P.B.C. with different levels of I.P.R.
- 6. There is no significant difference in the S.R. of P.S.C. with different levels of F.P.
- 7. There is no significant difference in the S.R. of P.S.C. with different levels of P.C.

I Group Hypotheses of Difference

- There is no significant difference in the A.A. of P.B.C. with different levels of P.I.
- 2. There is no significant difference in the A.A. of P.S.C. with different levels of A.C.R.

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- 3. There is no significant difference in the A.A. of P.S.C. with different levels of A.H.
- 4. There is no significant difference in the A.A. of P.S.C. with different levels of E.P.
- 5. There is no significant difference in the A.A. of P.B.C. with different levels of I.P.R.
- 6. There is no significant difference in the A.A. of P.S.C. with different levels of F.P.
- 7. There is no significant difference in the A.A. of P.S.C. with different levels of P.C.

I Group Hypotheses of difference

- There is no significant difference in the S.R. of children with different levels of P.Int.
- There is no significant difference in the A.A. of children with different levels of P.Int.

The Research Design.

The present study seeks to describe the Scholastic Readiness of Pre-school children, delve into the factors in the home affecting it and examine its influence on the Academic Achievement of the child.

The study could be broadly categorised into two stages. The first stage which deals with the 'Readiness' aspect of Pre-school children and the influence of 'Academic Achievement' of the child. The second stage deals with 'Home Environment' as a factor which would influence the 'Scholastic Readiness' of the child. Hence in this study, 'Scholastic Readiness' is both a dependent and an independent variable. In the first stage Scholastic Readiness is an independent variable and Academic Achievement and Personal Abilities are the dependent variables. In the first part it is attempted to find out how much Academic Achievement and Personal Abilities are dependent on the S.R., or in other words, how does S.R. influence the Academic Achievement and Personal Abilities of the child.

In the second stage, Home Environment is the independent variable and the Scholastic Readiness the dependent variable. The attempt here is to find out what influence H.E. exercises on S.R.

The aspects included in this study under each variable are given below.

- 1. Scholastic Readiness
 - a. Motor Skills.
 - b. Cognitive Skills.
 - c. Paychosocial Skills.
 - d. Language Skills.

- e. Socio-economic Status.
- 1. Number of Siblings.
- g. Residential area.

B. Parental Involvement and Interest.

- a. Attitude to Child Rearing.
- b. Actual Handling.
- c. Expectations of Parents.
- d. Interpersonal Relations.
- e. Facilities provided.
- f. Preparation of the child for schooling.
- Q. Attendance at the interview.

Methods :

The purpose of the study is to investigate into the Scholastic Readiness of Pre-school children, the associated aspects in the child and at home, and its influence on Academic Achievement. The study is mainly an exploratory one.

The method used is the descriptive method of the comparative and correlative types. It attempts to describe the Scholastic Readiness of the Pre-school children, and the aspects involved. It also attempts to describe the environmental conditions at home delving deep into the home

factors that influence the child's Scholastic Readiness.

Lastly it attempts to study the influence of Scholastic Readiness on the Academic Achievement of the child. It also attempts to compare children with different levels of Scholastic Readiness on Academic Achievement and children with different Home Background on Scholastic Readiness. The correlation between Scholastic Readiness and Academic Achievement is also established.

Sample: 1

The population of the study was the pre-school age children.

Sampling Methodi

Incidental sampling method was used i.e. the children who were studying in S.I.E.S. — those who sought admission and were admitted, formed the sample for the various aspects of the study. They consisted of both boys and girls between the ages of 3 to 5 1/2 years. The sample is basically urban in nature though there were some whose parents have been recent migrants to the city. They belonged to middle S.E.S. and lower S.E.S. families.

Nature & Size of the Samole:

Preliminary Study: Children studying in the year 1985-1986

batch numbering 484 comprised the sample for the preliminary study to investigate into the characteristics associated with scholastic achievement and enlist them.

Pre-Test: 15 children were selected randomly from those who sought admission in 1986-87 to conduct a pre-test to determine the administration procedure of the screening device.

Pre-Pilot 50 children were selected again randomly from those who sought admission in 1986-87 and the screening device was administered for item analysis and discrimination index.

Pilot-Study: 344 children who sought admission in 1986-87 for Jr. K.G. Class comprised the sample for administering the final form of 'Scholastic Readiness Screening Device to establish the reliability of the tool.

Final Sample: Children admitted in S.I.E.S. in 1987-88 numbering 337 of which 308 joined the school, comprised the sample for describing the Scholastic Readiness of pre-school children, studying the influence of the home background on it and examining its relationship with A.A.

Table 6.1 shows the Nature and size of the

TABLE 6.1

NATURE AND SIZE OF THE SAMPLE AT VARIOUS STAGES OF THE STUDY

Nature of Work Stage	: : Year :	: Boys	t : Girls	: Total Sample
Preliminary	1985-86			And the second of the second o
Study	: Jr.K.G.	t : 139	124	: 263
,	. Sr.K.G.	114	107	: 221
	E construction and construction only open past		; ;	484
Pre-test	:1986 Jan	6	, 7	1 15
Pre-Pilot	:1986 Jan	27	t 23	: 50
Pilot Study	:1986 Feb	1	!	!
No Boreened	i .	244	179	423
No.Belected for Admission	1	213	. 156	371
Taok Admission	1 1	! 198 ':	i 146	344
	1987 F#b			*
No. Screened	1	279	178	457
No-Selected for Admission	1 1	230	139	4 1 369 1
Took Admission	2 1 1	213	124	337
Sample of parents	E	1, 177 1	101	t : 278
ample for inal Study	\$ (1)			E B. Marin again dans stag york spatt stag tank bess beds bath byth byth filter on-
Took Admission Remaining with	The same and the s	7. 2. 1	124.	: 337 :
14		192	114	; 30B

Tools Used:

To collect the required data necessary to investigate into the Scholastic Readiness and the influence of the Home Environment, and the relation of Scholastic Readiness with Academic Achievement, appropriate tools were required. The data required for the study were in the following areas:

- (a) Scholastic Readiness of the Pre-school children.
- (b) Academic Achievement of the pre-school children.
- (c) Personal Abilities of the pre-school children.
- (d) Home Environment of the Pre-School children

The tools used by the researcher could be broadly categorised into two :-

- (1) Tools devised by the researcher.
- (ii) Tools adopted from the school records.

In the former category were

- a. Scholastic Readiness Screening Device.
- b. Interview Schedule (for parents).

In the latter category were :

- a. Checklist.
- b. Admission forms. ;)
- C. Progress Reports Cart Con the Control of the Con
- d. Rating #c=14

Data were collected from children and parents. While constructing the tools all the necessary pre-requisites were carefully considered that is

- 1. Scanning of related literature on tools.
- Studying the procedures to be followed while devising a tool for the very young.
- 3. Conducting a survey of P.S.C. at S.I.E.S. to ascertain the characteristics associated with High and Low achievers.
- 4. Appropriate selection of items.
- 5. Item Analysis and Discrimination Index.
- 6. Content validity.
- 7. Deciding the administration procedure and scoring.
- 8. Reliability of the tools (Test-retest reliability).

The construction of tools went through

A Pre-Study - for determining the items.

A Pre-Test - for determining the administration.

A Pre-Pilot - for item analysis and discrimination index.

A Pilot study - test-retest reliability.

Scaring

For 'S.R. device'

The B.R. acreening device on the whole carried 100 scores thus.

Motor skills	30
Cognitive skills	20
Paychr or al skills	30
Comprehension of	
English Language	10
Total	100

Each of the category had subdivisions.

For the 'Interview Schedule'.

A three point scale has been provided for scoring — Yes, No, Don't know were the three alternative answers. The highest a parent could score in an item was 3 and the lowest 1. In each of the variable a parent could score maximum of 30 and minimum of 10 scores. On the whole the entire Interview schedule carried 180 marks. Manual scoring was done of all the variables with the help of one assistant. After completing the scoring, the score tables and data-sheet were prepared.

Data Collection.

The researcher personally administered the tools and collected the data. The data was collected from P.S.C. and their parents. Absolute care was taken to establish the

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necessary rangers parts ularly with the children and ensure confidentiality to the parents.

Analysis of Data

Description of Data : Data are described using frequency distributions, frequency polygons, percentage distributions and polygons, bar diagrams, mean, median, mode, skewness, S.D. and Kurtosis.

Fiduciary limits for the mean and SD were also found out at the 0.05 and 0.01 levels.

Inferential Analysis : Hypotheses are tested using correlation of coefficient, One-way analysis of variance or ANOVA and t-test.

Those hypotheses indicating relationships are tested using correlational techniques and their significances are found.

The null hypotheses of differences are tested employing the one way ANOVA and the 't-test'.

Major Findings :

The various null hypothesis were tested by use of the appropriate techniques and the findings in each case

are as follows :

- A. 1 a) There is a significant positive but moderate relationship between S.R. and A.A. of P.S.C.
 - h) There is a dignificant positive and substantial relationship between S.R. and A.A. of P.S.C. at 1St U.T.
 - c) There is a significant positive, moderate relationship between S.R. and A.A. of P.S.C. at 1 st S.E.
 - d) There is a significant positive but low relationship between S.R. and A.A. of P.S.C. at 2nd U.T.
 - e) There is a significant positive but very low relationship between S.R. and A.A. of P.S.C. at 2nd S.E.
- A. 2 a) There is a significant, low but positive relationship between M.S. and A.A. of P.S.C.
 - b) There is a significant, moderate and positive relationship between M.S. and A.A. at 1st U.T. of P.S.C.
 - c) There is a significant, moderate and positive, relationship between M.S. and A.A. at 1 S.E. of P.S.C.

- d) There is a significant low but positive relationship between M.S. and A.A. at 2nd U.T. of P.S.C.
- e) There is a significant very low but positive relationship between M.S. and A.A. at 2nd S.E. of P.S.C.
- A. 3 a) There is a significant, positive and moderate relationship between C.S. and A.A. of P.S.C.
 - b) There is a significant, positive and substantial relationship between C.S. and A.A. at 1st U.T. of P.S.C.
 - c) There is a significant, positive and substantial relationship between C.S. and A.A. at 1 S.E. of P.S.C.
 - d) There is a significant, positive and moderate relationship between C.S. and A.A. at 2nd U.T. of P.S.C.
 - e) There is a significant, positive but low relationship between C.S. and A.A. at 2nd S.E. of P.S.C.
- A. 4 a) There is a significant, moderate but positive relationship between P.S. and A.A. of P.S.C.
 - b) There is a significant, substantial and positive relationship between P.S. and A.A. at 1st U.T. of P.S.C.

- c) There is a significant, positive and moderate relationship between P.S. and A.A. at i S.E. of P.S.C.
- d) There is a significant low but positive relationship between P.S. and A.A. at 2nd U.T. of P.S.C.
- e) There is a significant, positive but low relationship between P.S. and A.A. at 2nd S.E. of P.S.C.
- A. 5 a) There is a significant, moderate and positive relationship between C.E.L. and A.A. of P.S.C.
 - b) There is a significant, substantial and positive relationship between C.F.L. and A.A. at 1st U.T. of P.G.C.
 - c) There is a significant, positive and moderate relationship between C.E.L. and A.A. at 1st S.E. of P.S.C.
 - d) There is a significant, moderate and positive relationship between C.E.L. and A.A. at 2nd U.T. of P.S.C.
 - e) There is a significant, low but positive relationship between C.E.L. and A.A. at 2nd S.E. of P.S.C.

On the basis of the above findings it can be concluded that Scholastic Readiness is related to the

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Academic Achievement of Pre-school Children. between Scholastic Readiness and relationship Achievement are positive though moderate. It may be observed that the relationship is highest at the 1 st U.T., that is. the start of the school, decreasing gradually till the final exams, that is at the end of the year. No one can deny the importance of starting something well equipped to take up the demands and expectations of that task. Hence, then it goes saying that Scholastic Readiness without strengthens the child's abilities to face the school. requirements which in turn aids in acquiring better 'Academic Needless to add, the irrepairable damage that lack of this readiness could cause would range from scores in Academic Achievement, struggling to cope with expectations of school to low Self-image and Concept'. This has been also supported by several mentioned in Chapter II aggravating the problems of school failures, school dropouts, stagnation, etc.

the components of Scholastic Readiness also have a close link with Academic Achievement though in varying degrees. Of the components, Comprehension of English Language (C.C.L.) and Cognitive skills (C.S.) have a higher relationship followed by Psychosocial skills (P.S.) and Motor skills (M.S.). The trend is the same with all the components i.e. a close link with Academic Achievement though in varying degrees. This can be observed from the correlation matrix

given in Table 5.1 - that is the relationship of components of Scholastic Readiness and Academic Achievement is high to begin with at 1 the U.T. tapering gradually to low as with the advancement of the year. It may be concluded that the C.E.L. and C.S. are significant determinants of Academic Achievement for Pre-school Children. All the components of Scholastic Readiness are significantly correlated with the scores of Academic Achievement.

B. 1 a) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of S.R.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of S.R.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of S.R.

b) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of M.S.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of M.S.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of M.S.

C) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of C.S.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of C.S.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of C.S.

d) There is a significant difference in the A.A. of P.S.C. at 0.05 level with High and Moderate levels of P.S.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of P.S.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of P.S.

e) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of C.E.L.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of C.E.L.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of C.E.L.

B. 2 a) There is a significant difference in the L.S. of P.S.C. with High and Moderate levels of S.R.

There is a significant difference in the L.S. of P.S.C. with High and Low levels of S.R.

There is no significant difference in the L.S. of P.S.C. with Moderate and low levels of S.R.

b) There is a significant difference in the L.S. of P.S.C at O.OS level with High and Moderate levels of M.S.

There is a significant difference in the L.S. of P.S.C. with High and Low levels of M.S.

There is no significant difference in the L.S. of P.S.C. with Moderate and Low levels of M.S.

at 0.05 level with High and Moderate levels of C.S.

There is a significant difference in the L.S. of P.S.C. with High and Low levels of C.S.

There is no significant difference in the L.S. of P.S.C. with Moderate and Low levels of C.S.

d) There is a significant difference in the L.S. of P.S.C at O.O5 level with High and Moderate levels of P.S.

There is a significant difference in the L.S. of P.S.C. with High and Low levels of P.S.

There is no significant difference in the L.S. of P.S.C. with Moderate and Low levels of P.S.

e) There is a significant difference in the L.S. of P.S.C. with High and Moderate levels of C.E.L.

There is a significant difference in the L.S. of P.S.C. with High and Low levels of C.E.L.

There is no significant difference in the L.S. of P.S.C. with Moderate and Low levels of C.E.L.

B. 3 a) There is a significant difference in the N.W. of P.S.C. with High and Moderate levels of S.R.

There is a significant difference in the N.W. of P.S.C. with High and Low levels of S.R.

There is no significant difference in the N.W. of P.S.C. with Moderate and Low levels of S.R.

b) There is a significant difference in the N.W. of P.S.C. at 0.05 level with High and Moderate levels of M.S.

There is a significant difference in the N.W. of P.S.C. with High and Low levels of M.S.

There is no significant difference in the N.W. of P.S.C. with Moderate and Low levels of M.S.

c) There is a significant difference in the N.W. of P.S.C. High and Moderate levels of C.S.

There is a significant difference in the N.W. of P.S.C. with High and Low levels of C.S.

There is no significant difference in the N.W. of P.S.C. with Moderate and Low levels of C.S.

d) There is a significant difference in the N.W. of P.S.C. with High and Moderate levels of P.S. at 0.05 level.

There is a significant difference in the N.W. of P.S.C. with High and Low levels of P.S.

There is no significant difference in the N.W. of P.S.C. with Moderate and Low levels of P.S.

e) There is a significant difference in the N.W. of P.S.C. with High and Moderate levels of C.E.L.

There is a significant difference in the N.W. of P.S.C. with High and Low levels of C.E.L.

There is no significant difference in the N.W. of P.S.C. with Moderate and Low levels of C.E.L.

B. 4 a) There is a significant difference in the G.K. of P.S.C. with High and Moderate levels of S.R.

There is a significant difference in the G.K. of P.S.C. with High and Low levels of S.R.

There is no significant difference in the G.K. of P.S.C. with Moderate and Low levels of S.R.

b) There is a significant difference in the G.K. of P.S.C at O.O5 level with High and Moderate levels of M.S.

There is a significant difference in the G.K. of P.S.C. with High and Low levels of M.S.

There is no significant difference in the G.k. of P.S.C. with Moderate and Low levels of M.S.

at 0.05 level with High and Moderate levels of C.S.

There is a significant difference in the G.K. of P.S.C. with High and low levels of C.S.

There is no significant difference in the G.K. of P.S.C. with Moderate and Low levels of C.S.

d) There is a significant difference in the G.K. of P.S.C at 0.05 level with High and Moderate levels of P.S.

There is a significant difference in the G.K. of P.S.C. with High and Low levels of P.S.

There is no significant difference in the B.K. of P.S.C. with Moderate and Low levels of P.S.

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e) There is a significant difference in the G.K. of P.S.C. with High and Moderate levels of C.E.L.

There is a significant difference in the G.K. of P.S.C. with High and Low levels of C.E.L.

There is no significant difference in the G.K. of P.S.C. with Moderate and Low levels of C.E.L.

On the basis of the result: it can be concluded that the children with high scores in Scholastic Readiness score distinctly high scores in Academic Achievement. The difference is maximum in High and Low groups constantly. The difference in High and Moderate groups is significant and the Moderate and Low groups do not differ at all.

The same trend can be observed with all the components though in varying degrees. Children with high scores in these components fare much better in Academic Achievement. The difference here again is highest in High and Low groups all throughout. The High and Moderate differ to a certain extent but the Moderate and low do not differ at all.

- C. i a) There is no significant difference in the S.R. of boys and girls.
 - b) There is no "magnificant difference in the M.S. of boys and girls and and second

- c) There is no significant difference in the C.S. of boys and girls.
- d) There is no significant difference in the P.S. of boys and girls.
- e) There is no significant difference in the C.E.L. of boys and girls.
- C. 2 a) There is no significant difference in the A.A. of boys and girls.
 - b) There is no significant difference in the A.A. at $\mathbf{1^{St}}$ U.T. of boys and girls.
 - c) There is no significant difference in the A.A. at 1st S.E. of boys and girls.
 - d) There is no significant difference in the A.A. at 2^{nd} U.T. of boys and girls.
 - e) There is no significant difference in the A.A. at \mathbb{R}^{nd} S.E. of boys and girls.
- C. 3 a) There is no significant difference in the L.S. of boys and girls.
 - b) There is no significant difference in the L.S. at 18t U.T. of boys and girls.
 - c) There is no significant difference in the L.S. at 1 st S.E. of boys and girls.

- d) There is no significant difference in the L.S. at \mathbb{R}^{nd} U.T. of boys and girls.
- e) There is no significant difference in the L.S. at 2nd S.E. of boys and girls.
- C. 4 a) There is no significant difference in the N.W. of boys and girls.
 - b) There is no significant difference in the N.W. at $\mathbf{1}^{\text{st}}$ U.T. of boys and girls.
 - c) There is no significant difference in the N.W. at 1st S.E. of boys and girls.
 - d) There is no significant difference in the N.W. at Ind U.T. of boys and girls.
 - e) There is no significant difference in the N.W. at 2nd S.E. of boys and girls.
- C. 5 a) There is no significant difference in the G.K. of boys and girls.
 - b) There is no significant difference in the G.K. at 1^{St} U.T. of boys and girls.
 - c) There is no significant difference in the G.K. at 1 st S.E. of boys and girls.
 - d) There is no significant difference in the G.K. at 2nd U.T. of boys and girls.

e) There is no significant difference in the G.K. at 2nd S.E. of boys and girls.

The conclusion that seems to be interesting is that Sex does not affect the S.R. or the Academic Achievement of the Pre-school Children. There is no significant difference in both Scholastic Readiness and Academic Achievement of boys and girls.

- D. 1) There is no significant difference in the S.R. of P.S.C. from different age groups.
 - There is no significant difference in the M.S. of P.S.C. from different age groups.
 - 3) There is no significant difference in the C.S. of P.S.C. from different age groups.
 - 4) There is no significant difference in the P.S. of P.S.C. from different age groups.
 - 5) There is no significant difference in the C.E.L. of P.S.C. from different age groups.

The conclusion that emerges from these findings is that Scholastic Readiness is not affected by the age of the child. This means that there is some other factor influencing Scholastic Readiness.

. at there is a significant difference in the D.A. of ${\cal P}_*S$. with High and Moderate levels of S.R.

There is a significant difference in the O.A. of P.S.C. with High and Low levels of S.R.

There is no significant difference in the O.A. of P.S.C. with Moderate and Low levels of S.R.

b) There is a significant difference in the O.A. of P.S.C at 0.05 level with High and Moderate levels of M.S.

There is a significant difference in the O.A. of P.S.C. with High and Low levels of M.S.

There is no significant difference in the O.A. of P.S.C. with Moderate and Low levels of M.S.

c) There is a significant difference in the G.A. of P.S.C. with High and Moderate levels of C.S.

There is a significant difference in the O.A. of P.S.C. with High and Low levels of C.S.

There is no significant difference in the O.A. of P.S.C. with Moderate and Low levels of C.S.

d) There is a significant difference in the G.A. of P.S.C at 0.05 level with High and Moderate levels of P.S.

There is a significant difference in the Q.A. of

P.S.C. with High and Low levels of P.S.

There is no significant difference in the D.A. of P.S.C. with Moderate and Low levels of P.S.

e) There is a significant difference in the D.A. of P.S.C. with High and Moderate levels of C.E.L.

There is a significant difference in the O.A. of P.S.C. with High and Low levels of C.E.L.

There is no significant difference in the O.A. of P.S.C. with Moderate and Low levels of C.E.L.

Even with O.A. it can be observed that the scores are high of children with high scores in Scholastic Readiness. High scores in O.A. are also seen of children of with high scores in the components of Scholastic Readiness. It may be concluded that if the level of Scholastic Readiness is high the Other Activities—scores are more favourable.

- F. 1) There is a significant, positive but low relationship between S.R. of P.S.C. and T.R. on S.A.
 - 2) There is a significant, positive but negligible relationship between S.R. of P.S.C. and T.R. on P.D.
 - 3) There is a positive, significant but low relationship between S.R. of P.S.C. and T.R. on M.A.

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- relationship between S.R. of P.S.C. and T.R. on S.S.
- 5) There is a significant positive but low relationship between S.R. of P.S.C. and T.R. on P.T.
- 6) There is a significant positive but low relationship between S.R. of P.S.C. and T.R. on K.E.

It can be concluded from these findings that there is a positive and significant though low relationship between T.R. on S.A. and S.R. of P.S.C. All the components of S.A. also seem to be positively related to S.R. though in varying degrees. The highest relationship can be derived between S.R. and T.R. on P.T. and the lowest between S.R. and T.R. on P.T.

This has significant implications in evaluating the readiness of the child. If the S.R. device is not teasible to be used by the teacher due to lack of time, personnel, space and so on, she may perhaps continue with her "Rating Scale" carefully to note down the observations about the child's capacities and potentials and design sessions to enhance the aspects that need support and guidance.

G. 1) There is a significant difference in the S.R. of P.S.C. with High and Moderate levels of P.E.

There is a significant difference in the S.R. of

P.S.C. with High and Low levels of P.E.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of P.E.

2) There is a significant difference in the S.R. of P.S.C. with High and Moderate levels of M.E.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of M.E.

There is a significant difference in the S.R. of P.S.C at 0.05 level with Moderate and Low levels of M.E.

3) There is a significant difference in the S.R. of P.S.C. at 0.05 level with High and Moderate levels of F.E.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of F.E.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of F.E.

4) There is a significant difference in the S.R. of P.S.C. at 0.05 level with High and Moderate levels of M.O.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of M.O.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of M.O.

5) There is a significant difference in the S.R. of P.S.C. with Very High and High levels of F.D.

There is a significant difference in the S.R. of P.S.C. with Very High and Moderate levels of F.D.

There is a significant difference in the S.R. of P.S.C. with Very High and Low levels of F.D.

There is a significant difference in the S.R. of P.S.C. with Very High and Very Low levels of F.O.

There is a significant difference in the S.R. of P.S.C. with High and Moderate levels of F.O.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of F.O.

There is a significant difference in the S.R. of P.S.C. with High and Very Low levels of F.D.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of F.D.

There is no significant difference in the S.R. of P.S.C. with Moderate and Very Low levels of F.O.

There is no significant difference in the S.R. of P.S.C. with Low and Very Low levels of F.O.

6) There is no significant difference in the S.R. of P.S.C. with Low and Moderate levels of S.E.S.

There is a significant difference in the S.R. of P.S.C. with Low and High levels of S.E.S.

There is a significant difference in the S.R. of P.S.C. with Low and Very High levels of S.E.S.

There is a significant difference in the S.R. of P.S.C. with Moderate and High levels of S.E.S.

There is a significant difference in the S.R. of P.S.C. with Moderate and Very High levels of S.E.S.

There is no significant difference in the S.R. of P.S.C. with High and Very High levels of S.E.S.

7) There is no significant difference in the S.R. of P.S.C. with only child and one sibling.

There is a significant difference in the S.R. of P.S.C. with only child and two siblings.

There is a significant difference in the S.R. of P.S.C. with only child and three and above siblings.

There is a significant difference in the S.R. of P.S.C. at 0.05 level with one sibling and two siblings.

There is a significant difference in the B.R. of P.S.C. with one sibling and three and above siblings.

There is a significant difference in the B.R. of

P.S.C. with two siblings and three and above siblings.

8) There is no significant difference in the S.R. of P.S.C. of Sion and Matunga R.A.

There is no significant difference in the S.R. of P.S.C. of Sion and Kolivada R.A.

There is a significant difference in the S.R. of P.S.C. of Sion and Dharavi R.A.

There is no significant difference in the S.R. of P.S.C. of Matunga and Kolivada R.A.

There is a significant difference in the S.R. of P.G.C. of Matunga and Dharavi R.A.

There is no significant difference in the S.R. of P.S.C. of Kolivada and Dharavi R.A.

The findings very clearly reveal that Home background is an important factor influencing S.R. of P.S.C. The better the Home Background higher are the S.R. scores and vice versa. Each of the components of Home Background seem to constitute significantly to the S.R. scores. There is a significant difference consistently on the S.R. scores of students from High and Moderate Home Background and High and Low Home Background. With the Moderate and Low there is no significant difference in S.R. scores excepting in Mother's

education. This means that Mother's education is of importance for the development of the S.R. of the pre-school child.

H. 1) There is a significant difference in the S.R. of P.S.C. with High and Moderate levels of P.I.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of P.I.

There is no significant difference in the S.R. of P.S.C at 0.05 level with Moderate and Low levels of P.I.

2) There is a significant difference in the S.R. of P.S.C at 0.05 level with High and Moderate levels of A.C.R.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of A.C.R.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of A.C.R.

3) There is a significant difference in the S.R. of P.S.C. with High and Moderate levels of A.H.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of A.H.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of A.H.

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at 0.05 level with High and Moderate levels of P.E.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of P.E.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of P.E.

5) There is a significant difference in the S.R. of P.S.C. with High and Moderate levels of I.P.R.

There is a significant difference in the S.R. of P.S.C. with High and low levels of I.P.R.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of I.P.R.

6) There is a significant difference in the S.R. of P.S.C. with High and Moderate levels of F.P.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of F.P.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of F.P.

7) There is a significant difference in the S.R. of P.S.C. with High and Moderate levels of P.C.

There is a significant difference in the S.R. of P.S.C. with High and Low levels of P.C.

There is no significant difference in the S.R. of P.S.C. with Moderate and Low levels of P.C.

From these findings it can be concluded that P.I. and its components are an important factor influencing the S.R. scores. Children score high on S.R. whose parents have scored high on P.I. The difference is consistently significant with High and Low P.I., followed by High and Moderate groups. On the whole, though the Moderate and Low groups differ significantly in S.R. scores, on the components individually there is no significant difference.

1) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of P.I.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of P.I.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of P.I.

2) There is a significant difference in the A.A. of P.S.C at 0.05 level with High and Moderate levels of A.C.R.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of A.C.R.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of A.C.R.

3) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of A.H.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of A.H.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of A.H.

4) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of E.P.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of E.P.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of E.P.

5) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of I.P.R.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of I.P.R.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of I.P.R.

6) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of F.P.

There is a significant difference in the A.A. of

P.S.C. with High and Low levels of F.P.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of F.P.

7) There is a significant difference in the A.A. of P.S.C. with High and Moderate levels of P.C.

There is a significant difference in the A.A. of P.S.C. with High and Low levels of P.C.

There is no significant difference in the A.A. of P.S.C. with Moderate and Low levels of P.C.

On the basis of these findings it can be concluded that P.I. and its components are an important factor influencing the A.A. scores. High scores in P.I. obtained by parents is a determinant for obtaining High scores in A.A. The difference is significant constantly with High and Low P.I. categories. The High and Moderate categories in P.I. also differ significantly excepting in A.C.R. where the difference is at 0.05 level only. There is no significant difference in any of the components with the Moderate and Low categories. Thus Parental Involvement (P.I.) is of importance for favourable A.A. scores.

Parental Interest (P.Int.) was the next variable considered for testing the differences in A.A. and S.R.

p,int was formulated on the basis of response of parents for the interview. There were four categories available on the basis of attending the interview.

Both Parents who came.

Only Mothers who came.

Only Fathers who came.

Non Respondents.

The S.R. and A.A. scores were arranged in these category-wise and the ANOVA was computed the findings of which are -

j. 1) There is a significant difference in the S.R. of P.S.C. with Father's and Mother's P.Int.

There is a significant difference in the S.R. of P.S.C. with Father's and Both Parents P.Int.

There is a significant difference in the S.R. of P.S.C. with Father's and Non Respondents.

There is no significant difference in the S.R. of P.S.C. with Mother's and Both Parents P.Int.

There is a significant difference in the S.R. of P.S.C. with Mother's and Non Respondents.

There is a significant difference in the S.R. of P.S.C. with Both Parents and Non Respondents.

2) There is a significant? destermined income A.A. of

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P.S.C. with Father's and Mother's P.Int.

There is a significant difference in the A.A. of P.S.C. with Father's and Both Parents P.Int.

There is no significant difference in the A.A. of P.S.C. with Father's and Non Respondents.

There is no significant difference in the A.A. of P.S.C. with Mother's and Both Parents P.Int.

There is a significant difference in the A.A. of P.S.C. with Mother's and Non Respondents.

There is a significant difference in the A.A. of P.S.C. with Both Parents and Non Respondents.

The findings reveal that Parental Interest is an important factor influencing both S.R. and A.A. of P.S.C. The Non Respondent's children differ significantly from children whose Both Parents or only Mothers attended the interview. The mean score of S.R. of children of the Non Respondents is also the least, compared to all other three categories. The scores of S.R. and A.A. of children whose father's only attended seem to differ significantly from Mother's and Both Parents perhaps because even though they did show interest and attend the interview, due to lack of time they are unable to provide the necessary stimulation and motivation for the child's progress in the day to day activities. The scores of children whose mother's only

responded do not seem to differ from the 'Both Parents' category perhaps because the child's caring and rearing is predominantly taken care of by Mother's and the child progresses equally well with her nurturance. Most of the lathers who came alone expressed the inability of their wives to respond to the interview because of language problem or tack of education or exposure, excepting a few who could not come either due to illness or neonate in the home. With this kind of background it is but obvious that the mother who is with the child for long hours lacks the necessary capacities for appropriate nurturance and stimulation.

Summary of Findings & Suggestions

following findings can be summarized from the study :

- i) Scholastic Readiness of the child is positively though moderately related to the Academic Achievement of the child. By helping the child develop the necessary readiness to take up tasks revolving around scholastic abilities, the child's performance in the 'Academic' field can be enhanced. Thus every effort must be made to develop and strengthen the S.R. of P.S.C.
- are positively related to Academic Achievement in varying degrees the "Comprehension of English Language" is significantly and substantially correlated. This means

that efforts must be in the direction of language development and understanding of English. Since the schools follow English as the medium of instruction it is important that children who do not have exposure to the language have special sessions designed to be organised informally.

- 3) The study reveals that the relationship of Scholastic Readiness and Academic Achievement gradually decreased and by the end of the year is low. This is a heart warming indication as the children who are not ready can be taken up for enrichment programmes and their readiness can be strengthened faster. In this regard the Scholastic Readiness tool may be useful in specifically identifying which aspect of Scholastic Readiness is lacking in the child and efforts be made in that direction.
- 4) The study indicates that there is no difference in both Scholastic Readiness and Academic Achievement of boys and girls. This means that sex is not a contributing factor as far as Scholastic Readiness or Academic Achievement is concerned. But as far as Scholastic Readiness scores are concerned boys consistently score higher than the girls on the mean scores and as far as Academic Achievement scores are concerned the siris fair slightly better on the mean scores than the soles.

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⁵⁾ Home Background seems to the mortant "factor

influencing Scholastic Readiness and it goes without saving that children from the disadvantaged homes must be taken up for "Compensatory programmes" on the lines of "Head Start" and "Seasame Street" programmes already popular abroad. Special sessions need to be designed and devised side by side in the schools to cater to the stimulation and motivation of cognitive skills and language growth.

An Parental Involvement which has emerged as an important factor influencing Scholastic Readiness and Academic Achievement significantly needs to be encouraged. It must be mandatory for every school to organise parent education programmes to make parents aware of the importance of their involvement and interest in children. This could favourably enhance the child's capabilities for high scores in both Scholastic Readiness and Academic Achievement.

onicinations and Discussions

Scholastic Readiness is an important factor influencing Academic Achievement of Preschool childen. There is a moderate relationship between the two. This means that it is very important to develop the Scholastic Readiness of children. Appropriate enrichment programmes to develop the readiness in children who lack must be devised. Gare must be

taken to likep the needs and background of the child decenne the seconds so that they are meaningful. Ιn context the infiniastic Readiness screening device could be made use of which has been prepared for the research. would not only help in identifying children who are not ready but also in pinpointing the specific aspects in which Since the Scholastic Readiness need help. tool has subcategories on Motor skills, Cognitive skills, Psychosocial skills and Language skills it would be possible to work in special area in which guidance is the required for development. The tool should be used very cautiously discreetly - not to reject or label children as dull, bad or backward but only as an indicator of the child's readiness and a device to help teachers devise complementary enrichment programmes. Use of tool without concern to these aspects could be damaging to the self concept and self esteem of the thild and develop a negative attitude in him Indiscriminate use of tools and its ill effects learning. have been the concern of early childhood educators2. screening could be a continuous one and not just a once year kind of phenomenon. At regular intervals subtle use of the tool would enable the teachers to specifically identify

T.N. Kaul V. : Background Paper - Paper presented at the O.M.E.P. Regional Seminar in Early Childhood Education. Nov. 1991.

² Kumar R. : Alternatives to Admission Tests and Formal Curriculum. Paper presented at the O.M.E.P., Regional Semihar in early childhood Education. Nov. 1981 (1982) 1883.

the repairments and set goals in school programmes,

I t heartening to observe the Scholastic relationship 11 Readiness and Achievement, however, decreases with time. The correlation which is high at the 1st Unit test-time, gradually decreases to low by the 2"d Semester exam. But, then again, defeatism that might have crept in because of the need struggle to cope with the school demands, in the children who lacked readiness needs to be considered. In this context then it becomes evident that Scholastic Readiness must developed in pre-school children to help them cope with expectations and meet the demands of the school. must be directed in the development of each of the area viz. motor, cognitive, psychosocial and language.

The teaching strategy at this stage needs to be reviewed where in it is not going to be the routine, mundant ways of teaching and the syllabus and curriculum is predicted but one where the assessment of the group in general and the individual in particular are done and the programme built on these needs. This would automatically help children grow and develop their readiness for various school tasks. All the same it should not be that if the child is not ready, one waits till he is ready, but, devise same for developments of his readiness. At the same time continuous menitoring of the readiness of the group and sericing same for

enhancement is of paramount importance .

Since the scores of Academic Achievement of children with low Scholastic Readiness are also low, continuous offering of compensatory programmes are necessary to compensate for the lack of aspects, that would develop readiness in them.

The study concludes that Home Background (H.B.) is an important factor contributing to the Scholastic Beadiness of children. There is a significant difference in the Scholastic Readiness of children from different H.B. This implies that children coming from backgrounds which are not conductive to the development of Scholastic Readiness need partial attention. Since there is little chance of bringing about changes in the H.B. it is essential that the child may be attended in the area and necessary help rendered. Propropriate compensatory programmes prepared on the lines of blood Start would be of enormous help.

Parental Involvement has a high bearing on the Scholastic Readiness of Pre-school children. The higher the P.I. higher is the Scholastic Readiness and vice versa. This implies that P.I. is an important indicator of Scholastic Readiness and every parent must be made aware of the importance of P.I. This can be done by organising regular

enliate programmes of various kinds like Discussion group, individual conferences, Group conferences, Panel discussions, parent education seminars and so on. These contacts would enlighten parents on their role and it's influence on child's development.

Parents must be encouraged to develop close interpersonal relations with the child, motivating and stimulating his potentials and nurturing his curiosity and inquisitiveness. This would enable them to be efficient parents and influence the child in the right direction.

Parental Involvement also has a great bearing on the Academic Achievement of pre-school children. There is a significant difference in the Academic Achievement of children with different levels of P.I.. Every component of P.I. that is the Attitude to Child Rearing (A.C.R.), Actual Handling (A.H.), Interpersonal Relations (I.P.R.), Expectations of Parents (E.P.), Facilities Provided (F.P.) and Preparation of the Child (P.C.) is all significantly contributing to the Academic Achievement of pre-school children. It becomes imperative then that extension and expansion programmes apart from school routine (both for children and parents) to compensate for the snags in the environment be organised which would take care of difficulties posed by pre-school children.

Suggestions for Further Study

As studies on young children and in the field of "Early Childhood Education" are very few in India it is almost a neglected area. There is a strong need for more research particularly related to the Indian context.

- 1) It would be beneficial to study developmental traits of young children from different backgrounds. This would have far-reaching benefits in curriculum planning and preparing compensatory and enrichment programmes.
- P) A comparative study could be undertaken on pre-school children from different backgrounds.
- term effects of Scholastic Readiness, whether it has any bearing on the child's school performance even after two or three years. The study could also probe into the influence of Scholastic Readiness on the child's Self Concept, personality characteristics, emotional development and so on.
- 1) Parental Involvement being identified as an important factor contributing to the Scholastic Readiness, there is need to study the ways and means of encouraging P.I. and getting them to nurture their children.

- the properties teaching methods to accommodate children from different levels need to be looked into since the method used could be an effective medium to enhance readiness in children.
- 6) Comparative studies are essential in the field of "Compensatory Education" with special reference to disadvantaged children in the urban and rural settings.
- 7) Indigenous instructional materials need to be devised which would be extremely beneficial in conducting the enrichment and compensatory programmes.

GENERAL SUGGESTIONS

The evidence from the study indicates that the differences exist in A.A. of children with different levels of S.R. The study has also identified general aspects of the home which contribute to the child's "Readiness" and his learning in school. The child comes equipped with the 'Readiness' from home and hence efforts must be taken to help the child develop the necessary S.R. at home.

H.B. & H.E. have been found to significantly contribute to the S.R. and influence the A.A. of the child. The child who comes to school with an educational and cognitive deficit is hand/capped to take on school tasks.

peen sufficiently exposed to "benificial" stimula at home to provide adequate background for school experiences.

the first and most popular explanation of why contain children fail to achieve in school is that thay suffer a deficiency of school related experiences. 1 Such children have not been adequately exposed to the beneficial stimulation and care that build the basis for A.A. in our school system.

Institutions involved in early childhood education must assume responsibilities to provide improved educational opportunities for children who are not ready.

There is a strong evidence from the evaluation of enrichment and compensatory programmes that parents particularly mothers can be taught to be effective teachers of their children and that their teaching efforts can benefit childrens developing skills. Z Early childhood educators have a big job ahead of them. They must determine what role

¹ Hess, R.D., Croft, D.J. : Teachers of Young Children. Boston. Houghton Mifflin & Co., 19 Pp. 136

² Nir-Janiv, N., Spodek, B., Steg, D.: Early College Education - An International Perspective New Plenum Pub. Corp. 1982. pp. 188 - 190.

they have in the early experience of children and help parents to identify and select the goals in this sphere more confidently.

Hence to promote readiness in pre-school children the stratergies to be adopted should be

- a) Changing the environment for the child at home through parent education programmes and creating an awareness in parents of their crucial role in stimulating and motivating the child to develop readiness.
- b) Providing aducational experiences in school in a more effective way through enrichment and compensatory programmes.
- recessary appropriate emphasis to pre-school education

Perhaps the most important rationals for the involvement of parents lies in the fact that they are critical influences in the early education of the young thild, even when they themselves are not highly educated. A child's early educational development gains from parental

¹ Hess, R.D., Croft, D.J. : <u>Teachers of Young Children</u>. Boston. Houghton Mifflin & Co., 1975 p. 79.

support and participation in the educational process. The nic school years are normally in the time when the child covelops educability, i.e. a readiness and a capability to learn from a formal institution such as the school. A child can be taught skills and attitudes which will prepare him to perform more successfully in school. Parents can provide the eccessary prientation towards the school.

Infact recent emphasis is being placed on infancy as the prime time to establish a base for later learning in the specific skills and concepts. If parent education programmes are methodically organised right from pre-natal and ante-natal clinics in making parents realise their paramount influence on their children, spectacular success can be achieved i.e. the readiness of child in various aspects.

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APPENDICES

- List of schools visited for Survey
- 11 First Draft of S.R. device
- III Experts for Content Validity
- IV Second draft of S.R. device
- y linal draft of S.R. device
- VI Interview Schedule
- VII Rating Scale
- /III Admission form
- 1x Progress Report Card
- y Other Activities

APPENDIX 1

LIST OF SCHOOLS VISITED FOR SURVEY

1.	Don Bosco, Matunga,	Bombay - 400 019.
3.	J.B. Vachaa, Wadala,	Bombay - 400 019.
3.	Dadar Parsi Youth Assembly Dadar	Bombay - 400 014.
4.	Learners Academy, Bandra	Bombay - 400 050.
'V.	Jamnabhai Narsee High School Vile Parle	Bombay - 400 057.
"	Udayachal Pre-Primary School, Vikhroli	Bombay - 400 079.
	Bombay Scottish, Shivaji Park	Bombay - 400 016.
ឞ.	Convent of Jesus & Mary, Byculla	Bombay - 400 008.
ω.	Vivekananda High School, Chembur	Bombay - 400 071.
10.	Greenlawns High School Warden Road	Bombay - 400 026.
11.	J.B. Petit, Fort,	Bombay - 400 023.
12.	St. Anthony's Chembur	Bombay - 400 071.
13.	St. Mary's Mazagaon	Bombay - 400 009.
	Holy Family School, Andheri	Bombay - 400 093.
15.		Bombay - 400 054.

APPENDIX II

DRAFT I

1TEMS COMPILED INITIALLY WERE AS FOLLOWS:

I. <u>COGNITIVE</u> S <u>KILLS</u>	II. APPARATUS FOR MOTOR SKILLS
1. Picture Recognition	1. Manipulative Toys
2. General Naming of Articles	2. Block Building
Visual Memory/Recall	3. Pyramids
1. Visual content	4. Peg Boards
5. Visual Retention	5. Cylindrical Pegboards
6. Visual Discrimination	6. Hollow Blocks
7. Colour Matching	7. Tray Puzzles
B. Visual Grouping	8. Needle and Beads
9. Matching shapes	9. Shoe Box for shapes & sizes
10. Matching of sizes	
11. Visual Rhythm	10. Rectangular Box
12. Visual Absurdities	II. POST BOX
13. Auditory Discrimination	
14. Auditory Memory	III. Psycho-Social Skills (For Observation)
15. Ability to Discriminate	1. Behaviour of Childreni-
16. Repeat sentences After Me	friendly and cooperative,
 Selecting Pictures Named b Function 	ctree A scateq
18. Selecting Similar Pictures and Placing Near it	Willing to leave parents Persuaded by parents
19. Motor Co-ordination - Arrange in Rows	Persuaded by parents and teachers Unwilling but later willing

20. Picture Conversation 3. Emotional States

- pt. General Conversation
- pp. Repeat After Me
- pg. Word Imitation
- 24. Sound Imitation
- 25. Letter Imitation
- 26. Sentence Imitation
- 27. Recalling Numbers
- 28. Recalling Words
- 79. Arranging Cards
- 30. rollowing Instructions
- 31. Pointing to the picture
- 32. Who uses them
- IV. Time and Gross Motor Skills (For observation)
- 1. Eve Control
- 2. Eve hand Co-ordination
- 3. Walking
- 4. Rumana
- 5. General Balance of self
- a. Concentration
- . Ability to try out/persistence
- H. Emotional Stability and Maturity

Happy and secure
Occasionally anxious
Often anxious
Continually anxious
Nervous

4. Ability to establish Relationships:

With Peers With Adults Independent and Aloof

5. Behaviour at Activities:

Enthusiastic & Eager Actively Involved Did when told Observed others only.

APPENDIX III

EXPERTS FOR CONTENT VALIDITY

Psychologist. Ms. Parikh, B. Counsellor.

Ms. Adrienwala, P.

Child Development Expert. Ms. kulkarnı, S.

Educationist. Ms. Kulkarni, M.

Sp. Educationist. Ms. D Sa, L.

Principal.

Supervisor pre-primary. Ms. kamala, K.

Teacher Educator (ECCE). Ms. Naville, K.

Teacher Educator (ECCE). Ms. Ranade, R.

Ms. Nagreth, N. Pre-school teacher. Ms. Govindani, k.

APPENDIX IV

DRAFT II

-	
1 -	Physical/motor Skills
•	Cognitive Functioning
٠.	Language and speech
•	Observation of Social/Emotional Features
٠.	In Physical/Motor Skills: The specific activities given
	to be performed were: a) Blocks b) Puzzles (simple)
	c) Beads d) Peg Boards.
	Foliowing elements were observed:
	1. His everhand co-ordination
	2. Motor control
	3. Ability to perform that task (to string the bead, to
	fit the peg into the hole of the pegboard).
	ه خواه الله الله الله الله الله الله الله ا
: 1.	In Coquitive Functioning, the sub categories were:
(4)	Picture Recognition: To name any four pictures - Animals/Vehicles/Vegetables/Fruits
(b)	Naming of <u>Articles</u> : To name any two articles — chair/window/door/book/table/fam/pencil/glass

- it the Of Articles : To name the use of the two articles - what are, 2 Articles named, used for?
- 1017 Instructions
 - Ability to Follow : Instruction was given and the : child was expected to follow it - 'Give the pencil to me', 'Keep the book on the table'.
- Matching of colours : Cards prepared in pairs and (e) and shapes : children were asked to match.

- III In Language and speech : The sub-categories were
- Picture Conversation : On zoo or children's garden or (a) daily routine (any one large picture dipicting these separately was shown to children to converse).
- General Conversation: On 'How many brothers and sisters do you have?', 'Where is your papa and mama:'?, (b) 'Which T.V. programmes do you like?', etc. were talked about.
- Repeat After me : Statements like 'I like to play', 'I (C.) want ball' were made and children were asked to repeat ıt.
- Speech Clarity : was scored on 3 point scale whether (.() it was clear, difficult to understand and baby talk.
- Visual Discrimination : Any 2 cutouts (of a Nurse (11) without a hand, a cat without a tail, a chair with three legs) were shown and the child was asked to name what is M1551NQ.

- 10 Observation of Social/Emotional Features :-
- (a) <u>Behaviour of children</u>:- Friendly and cooperative, Timid and shy, scared/cries.
- (b) Emotional Maturity: Willing to leave parents, persuaded by parents, persuaded by parents and teachers, unwilling but later willing.
- anxious, often anxious, continually anxious.
- adults, independent and aloof.
- Rehaviour at activities: Enthusiastic and eager, actively involved, did when told, observed others only.

APPENDIX V

THE FINAL DRAFT

ے پی اہم بات منا اللہ ہو کے اس کے ان جا ہم ہو ہو ہو ہو ہو ہو جا ہم ہو				
	3	Scores		
1. Physical/Motor skills	*	30		
2. Cognitive skills	t	30		
3. Psycho/social skills	:	30		
4. Comprehension of English Language	:	10		
Total	1	100		

I Physical/Motor skills :-

The specific activities to be performed were : -

الله المواقع ا	Scores
a. Beading the string	: 5
b. Peg Boards	5
c. Block Building	: 10
Puzzles	: 10 :

- . ollowing elements were observed :-
- 1 score each for a & b, 2 each for c & d)
- :) Eye Hand co-ordination
- (1) Motor control (grasp and grip)
- .ii) Ability to perform that task (to string the bead, to fit the peg into the hole of the peg-board)
- iv) Ability to complete that task
- v) Swiftness

Il Connitive skills :-

The sub categories were :-

a) Picture Recognition :-

To name four pictures (1 of each) :-

		Scores
a. Animals	:	2
b. Vehicles	t	2
c. Vegetables	ı	2
d. Fruits	ŧ	2
Total		8

b. Naming of Articles :-

To name any 2 articles (things in the room) i-

Alma Bara Malij Mali Mali, was aman janga ^{me} a para ware step gard aman areas data Mali Mani mina aling upon man man area step step step step plant data Mali Mani mina aling upon man man step step step step step step step step	1	Scores
Book	ŧ	2
Table	1	2
Total	ı	4

c. Repeat After Me :-

Following statements were made and the child was asked to repeat them :-

والله المحافظة المحاف	1	Scores
'I like to play'	1	2
'I want ball'	:	2
Total	1	4

d. Following Instructions :-

Following instructions were given and the child was expected to follow them :-

person programmer and the control of	:	Scores
'Give the pencil to me'	‡ 2	4
'keep the book on the table'	; ;	4
Total	· · · · · · · · · · · · · · · · · · ·	8

e. Speech clarity :-

This was scored on a 3 point scale :-

	(Total scores ~ 6)
clear	6 - 5
difficult to understand	4 - 3
Baby Talk .	2 - 1
	difficult to understand

III Psycho/social skills :-

This was assessed on the following points :-

a. Social competence :-

و من بالد بين بين بين بين بين بين بين من هن بين من وي بين بين بين بين بين بين بين بين بين بي		
	:	Scores
Friendly and co-operative	I	6 - 5
Timid and shy	*	4 - 3
Scared	<u> </u>	2 - 1

b. <u>Emotional Maturity</u>:-

The second secon		
	:	Scores
Willing to leave Parents	8	6 - 5
Persuaded by Parents	ı	4 - 3
Persuaded by Parents and leachers	:	2 - 1

c. Emotional State :-

The blast of the first part decided space and state of the space of th		
	:	Scores
Happy and secure	***************************************	6 - 5
Occasionally anxious	:	4 - 3
Often anxious	:	2 ~ 1

d. Behaviour at activities :-

	1	Scores
Enthusiastic and Eager	1	6 - 5
Actively involved	:	4 - 3
Did when told	!	2 - 1

e. <u>Establishino</u> <u>Relationships</u> :-

: Scores		
The same was transported and the same same same same same same same sam		6 - 5
Interacted freely	1	5 5
Interacted Occasionally	1	4 - 3
Independent and aloof	ī	2 - 1

'V Comprehension of English Language :-

•			ين ويلغ شهر مست زانات نبيت دوي ويور ومن شهر سنغ شدن دور او دو	P 40 0m
موار ما ال	appropried in and the control of th		Scores	
a.	The child was asked questions in			
	English and he answered in English	ţ	10 - 9	
b.	The child was asked questions in	1 1		
	English and he answered in	t		
	monosyllables	: :	8 - 7	
C.	The child was asked questions in	ŧ		
	English and he answered in Hindi	; ;	6 - 5	
d.	The child was asked questions in	i		
	Hindi and he answered in Hindi	; ;	4 - 3	
e.	The child was asked questions in	t		
	Hindi and he answered in	: :		
	monosyllables in Hindi	1	2 - 1	
			al libra man salah dan lang kan kan atan ban kan and man ang bah dan da	

APPENDIX VI

INTERVIEW SCHEDULE FOR PARENTS (TO ASSESS HOME ENVIRONMENT)

myrcts covered :-

- . Attitude to child rearing.
- ". Actual Handling.
- Interpersonal Relations.
- 1. Parental Expectations.
- 5. Facilities Provided.

something.

h. Preparation of the child for the interview.

1. Attitude To Child Rearing :-

THE THE PARTY OF T	
1) You feel that your child should obey you completely.	Agree/Somewhat /Do not Agree Agree
(1) You would give more importance to your son's education than your daughters.	Agree/Somewhat /Do not Agree Agree
in) A girl's carreer is not as important as the boy's.	Agree/Somewhat /Do not Agree Agree
Your attending to the child's school work is very important you feel.	Agree/Somewhat /Do not Agree Agree
) Play is a waste of time.	Agree/Somewhat /Do not Agree Agree
1) You will accept your child's suggestions.	Agree/Somewhat /Do not Agree Agree
11) You would accept any new changes in educating your child.	Agree/Somewhat /Do not Agree Agree
· 111) It is the teacher's job to educate the child.	Agree/Somewhat /Do not Agree Agree
ix) You will reason out when you	
want your child to do	Agree/Somewhat /Do not

Agree

Agree

You will spend more money on Agree/Somewhat /Do not toys and books.
Agree Agree

.. Actual Handling :-

- You take final decisions regarding your child.
 Yes/Sometimes/Never
- (1) You decide the type of play for him/her. Yes/Sometimes/Never
- 111) You compare your child with others. Yes/Sometimes/Never
- iv) When he misbehaves you usually punish him. Yes/Sometimes/Never
- v) When he refuses to obey, you generally get it done by threat. Yes/Sometimes/Never
- vi) You allow your child to question your behaviour. Yes/Sometimes/Never
- vii) He/she chooses the dress to wear when going out. Yes/Sometimes/Never
 - 111) You encourage your child to
 develop ways and behaviour typical
 to a boy or a girl. Yes/Sometimes/Never
- You encourage him to dress on his Yes/Sometimes/Never
 - You have to feed your child at meal Yes/Sometimes/Never times.

. Interpersonal Relations :-

- You play with your child. Yes/Sometimes/Never
- 11) Does he/she like to listen to music. Yes/Sometimes/Never
- 111) What does your child like best to play/to watch TV/Any other/Don't know

Yes/Sometimes/Never

1 V '	What are his interests.	Yes/Sometimes/Never
Į i	What are his dislikes.	Yes/Sometimes/Never
√)	What games does he play.	Yes/Sometimes/Never
1 1)	Does he prefer to be alone or in a	
	group.	Yes/Sometimes/Never
5 1 1 1)	Name 2 of his friends.	Yes/Sometimes/Never
ı	Whom does he like Mama/Papa/Both	
		Yes/Sometimes/Never
.)	Do you all eat together.	Yes/Sometimes/Never

i Comențal Expecțaționo :-

,)	Nid you look forward to this child.	Agree/Somewhat Agree	/Do not Agree
11'	Pid you expect an opposite sex child.	Agree/Somewhat Agree	/Da not Agree
111)	Are you happy with the way he seems to develop and progress.	Agree/Somewhat Agree	/Do not Agree
111	You get annoyed when he constantly asks questions on puzzling issues.	Agree/Somewhat Agree	/Do not Agree
)	You stress on studies a lot.	Agree/Somewhat Agree	/Do not Agræe
. 1)	You will develop him in co- curricular activities (sports drawing, music, dancing).	Agree/Somewhat Agree	/Do not Agree
, 1 1)	You promise a reward for good behaviour.	Agree/Somewhat Agree	/Do not Agree
. 1) You express joy over his achievements and encourage him to do better.	Agree/Somewhat Agree	/Do not Agree
1 x)	You support him even when he fails to achieve something.	Agree/Somewhat Agree	/Do not Agr##

) What do you want him to become specifies/haven't decided/says depends on the child.

5. Facilities Provided :-

(1)	Does he	have	a table to himself	2
	Does he	have	a shelf to himself	2
	Does he	have	a drawer to himself	2
	Desert be	have	books to himself	2
	Does he	have	toys to himself	2
				10

11. Is there T.V.

How much does he watch - 2 hrs/more	e 2/0
	1/0
Which programmes - Children	2
Serials	1
All	O
	A

111 Did you take your child on holiday outside Bombay

It yes

uhere,-	Native place	1
84	Pilgrimage	2
***	Sight seeing/Hill station	3

iv) Have you taken your child on outings	. ·-
Zma 2	
- Reach 2	
Aquarium 2	
- Museum 2	
8	
Preparation of the child for the Interview	1-
1) Did you prepare him in any special way for	the interview?
Yes/No	2/0
If Yes - taught yourself	2
sent him to another nurser	y 2
	eri nye emesirin nis
	6
(11) Did you teach him alphabets	2
numbers	2
names of things	2
nursery rhymes	2
Names of animals	2
	10
	,
(111) Did you read aloud ?	2
sometimes	2
Regularly	4
	6

(11/)	Have you	ı taught	him his	full	name	Yes/No	?
			A	ddres	9		2
			A	ge			2
			8	irthd.	ate yea	r	2
						•	8

APPENDIX VII

HATING SCALE

	:Evaluation	: Augi	ust:October	January	 : March
	ifor the imonth of	:	: UT:1st CE	ť	:
OCOCONAL	•	:	1	:	 1 1
PERSONAL DATA	:General Health	1;	:		
	:Cleanliness	=	:	To 1000 time the same rate age gap gam.	
an y dad wak an yan y sa kun ka y	:Discipline				I
	:Attention Spar		1		■●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●●
	:Observation	:	:		\$
MENTAL ABILITIES	:Curiosity	:	ŧ	t	:
	:Memory	:	* ** ** ** ** ** ** ** ** ** ** ** ** *	£	t
	:Receptivity	:			·
	Retention	:	• • • • • • • • • • • • • • • • • • •		•
	:Recall	:	* ** *** *** *** *** *** *** *** *** *	.	1
	:Leadership :Qualities	t :	:	: :	:
SOCIAL SKILLS	:Mixes Freely	1			1
BRILID	:Speaks :Freely	:	:	1	1
.	:Cooperative	1	i	1	
and the state an	:Cheerful	:			1
; ;	: Moody	*	# # # # # # # # # # # # # # # # # # #	:	
: , ,F/TRSONALIT'	:Restless	1	# # # Table State - State State State State State State State State	f	
TRAITS	:Confident		# # **********************************		
; ;	:Self-Reliant	*			; ;
:	:Generous	*	:		[

Appendin Mii

SOUTH INDIAN EDUCATION SOCIETY

R. A. GUBRAMANIAM ROAD, VIATUNGA, BOMBAY-400 OFF.
PRONT: 47 27 66,

FORM OF APPLICATION FOR ADMISSION TO KINDERGARTEN

739	r son or form doe	's mot	guar	rantee	admission.
2	Recomme vations	will	not	bo	entertaine d

1 Name of the Pupit broad to the All Control of the Pupit broad to the	-
1 a) Mother for pre 1077. (a) Date of birth: Date	
1 a) Mother for one 1077. (a) Date of birth: Date	
(a) Place of birth, A.J. a.E.A.A. (b) Date of birth: Date	
(Birth Certificate, in original to be attached a) Sendi Po. Vaccination Date	
(Birth Certificate, in original to be attached a) Sendi Po. Vaccination Date	
a) Small Po. Vacrination Date., Certificate No (Please attach))
b) Dedge Wase material	
b) Polic Varemation Date	
r) Triple Annigen Data	
d) B.C.G Date	
7. a) Name and address, in full of the Parent/Guardian Co. S.	, .
b) Februarional Conditionations b) Lather 1 file see that I are	
11) Mother Mc Rains Land & .	
c) Residential address Allfand All - Alle All - Alle All - All - Alle All - Al	
d) Telephone No. (if any) and the last 18th which I'm	
() Native place address Sand Production of the control of the cont	٠.
1) Number of Children	
g) If schooling, name of the such as the school and standard such as the school and standard	
8 a) Occupation of the Father / Quardino with office address in full and Feluphone No. (if any)	
b) Occupation of the mother with Office address in full and Telephone No. (if any)	
9. Monthly Income of Parent/Guardian	
I HEREBY DICLARE THAT THE ABOVEMENTIONED PARTICULARS ARE THUS AND THE BOY/GIRL HAS SO LAR NOT STUDIED IN ANY SCHOOL	4D 111(A)
Place : Bombay 400 019.	
Date ages as a Signature of Parent / trans	
Admitted in K. G. Class Jr	.)
Dute of Admission	, ,
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B00-12-84 CP. Becertary	المالية المالي المالية المالية المالي

APPENDIX IX

PROGRESS REPORT

may were upon upon pills them who been a	Evaluation for the month of	:August :1st UT	: October : 1st SE	:January :2nd UT	
	:Recognition	:	;	:	
	· .	:		*	
	Writing		** *** *** *** *** *** * *	:	***************************************
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	-	 I			1
	: TOTAL	:			** *** *** *** *** *** *** *** *** ***
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: •	:Recagnition	 :		:	
: NUMBER	:Writing			:	** ** ** ** ** ** ** ** ** ** *
: WORK :	:Spelling	:		:	
: :	:TOTAL	:	:	· •	
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	:GRAND TOTAL	:	1	I	<u> </u>
	:Grade	:	*** *** *** *** *** *** *** *** *** **		
: :	:Rank				
: :	:No. of Working :Days	!	:	1 1	gan and along man year and and and app may dist on
	:No of Days :Present	:	:	1	; ;
: : :	:Teachers :Signature	:		-	: :
: :	:Supervisors :Signature	:	:	-	\$ \$ **********************************
	:Parents :Signature	:	.	:	

OTHER COTIVINIES

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